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2.3 Terrestrial Ecol.

TERRESTRIAL BASELINE STUDIES QUARTERLY REPORT

on

FEDERAL OIL SHALE TRACT C-a

March - May 1976

Prepared for:

Rio Blanco Oil Shale Project

Prepared by:

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Based on data collected by:

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2.3 TERRESTRIAL STUDIES

2.3.1 Vegetation

2.3.1.3 Results

2.3.1.3.1 Data Organization and Content

Ten different vegetation types were sampled on or near Tract C-a during May 1976. Thirty-five permanent transects were sampled in May for the herbaceous stratum only, while 27 non-permanent transects were sampled for shrub and tree strata. Permanent and non-permanent transect data were combined to provide an accurate description of the study area vegetation types.

Field data are summarized and presented by vegetation type in tables at the end of this section. Raw data sheets are presented in Section 2.3.1.5 of this report. Sampling coverage and structural and compositional diversity are also depicted. The tables are organized by vegetation type and life form categories (tree, shrub and herbaceous) within each type. A written synopsis of each vegetation type accompanies the tables. It directs attention to the more important structural and compositional concepts as they relate to the functional and descriptive characterization of each vegetation type.

Parameters for the mature tree stratum presented in the tables and discussed in the synopsis include: relative cover, relative density, relative frequency, importance value, percent cover, percent frequency, constancy, cover in m^2 per hectare, density per hectare and basal area in m^2 per hectare.

Parameters for the shrub-tree seedling stratum presented in the tables and discussed in the text include: relative cover, relative density, relative frequency, importance value, percent cover, percent frequency, constancy, cover in m^2 per hectare and density in individuals per hectare.

Parameters for the herbaceous stratum presented in the vegetation type tables and discussed in the text include: relative cover, relative frequency, percent cover, percent frequency, constancy, sociability, cover in m^2 per hectare, density of forb species in number of individuals per quadrat ($.5\ m^2$) and density of forb species in number of individuals per hectare.

2.3.1.3.2 Floristics

The flora identified in the study area to date includes 5 tree species, 37 shrub species, 169 forb species and 46 grass and/or grasslike species. A list has been compiled arranging all species in four life form categories (tree, shrub, herbaceous or non-grasslike, and grass or grasslike). One shrub species addition to the complete list of plant species encountered in the study area (see Table 3-7-3 in the Annual Report, 1976) is included in Table 2.3-1.

2.3.1.3.3 Data Presentation

Aspen - The aspen type on the study area was sampled with two permanent transects and one non-permanent transect. Shrub and tree data were taken on the non-permanent transect, while only herbaceous data were taken on the permanent transects. Three strata and 24 species were identified for the aspen type: 2 species in the mature tree stratum, 7 species in the shrub stratum and 15 species in the herbaceous stratum.

The aspen type was sampled over an elevational range of 2481 to 2591 m (8,140 to 8,560 ft), with an average elevation of 2563 m (8,410 ft). The aspen type typically occurs on steep north- and east-facing slopes and is found on deep, sandy, loam soils which are high in organic matter accumulation.

The mature tree stratum (Table 2.3-2) contributed a total cover of 31%. It was dominated by Populus tremuloides, with a relative cover of 100%, a basal area of $4.0\ m^2$ per hectare and a density of 383 individuals per hectare. Pseudotsuga menziesii was only found in 20% of the tree and shrub quadrats.

Five species provided 47% total cover and a total density of 8,017 individuals per hectare for the shrub-tree seedling stratum (Table 2.3-3). Symphoricarpos oreophilus, Prunus virginiana and Amelanchier utahensis were the dominant species, contributing 44% of the total cover.

Fourteen species and one unknown contributed 1% total herbaceous stratum cover (Table 2.3-4). A sedge, Carex geyeri, was the dominant species over the type, providing 53% relative cover and occurring at a constancy of 100%.

Douglas-Fir - The Douglas-fir type was sampled with two permanent and one non-permanent transect during the reporting quarter. Shrub and tree data were taken on the non-permanent transect, while only herbaceous data were taken on the permanent transects. Three strata and 17 species were identified for the Douglas-fir type: 1 species in the mature tree stratum, 6 species in the shrub stratum and 10 species in the herbaceous stratum. Pseudotsuga menziesii occurred in both the tree and shrub strata.

Table 2.3-1. Addition to the list of plant species observed to date in the vicinity of Tract C-a for RBOSP (see Section 7.1A, Table 3-7-3 of the Annual Report, 1976).

SHRUBS

Abbreviation	Species
Tape[1]	Tamarix pentandra Pall.[2]; (Tamaricaceae)[3], Phan[4], Tamarisk, (V)[5] (I)[6]

[1] Abbreviation of genus and species in a four-letter code.

[2] Author citation, nomenclatural authority cited after each species name and delineated by a semicolon.

[3] The family of plants to which a species belongs in parentheses.

[4] Lifeforms of Plants

Phan (Phanerophyte) - Perennating bud at least 0.25 m above soil surface.
Cham (Chamaephyte) - Perennating bud between 0 and 0.25 m above soil surface.
Hemi (Hemicryptophyte) - Perennating bud in soil surface.
Cryp (Cryptophate) - Perennating buds covered by soil or water.
Ther (Therophyte) - Annual plants, perennating buds contained in seed.
Succ (Succulent) - Stems enlarged; serve as water storage organ.

[5] (V) - Voucher specimen collected.

[6] Origin of plant species
(N) - Native to the North American continent.
(I) - Introduced from outside the North American continent.

The Douglas-fir type was sampled over an elevational range of 2377 to 2591 m (7,800 to 8,500 ft), with an average elevation of 2539 m (8,330 ft). The Douglas-fir type is characteristically found on steep, north-facing slopes with shallow soils.

In the mature tree stratum (Table 2.3-5), Pseudotsuga menziesii provided 51% total cover and occurred at a density of 333 individuals per hectare. Total basal area for Pseudotsuga menziesii was 40 m^2 per hectare.

In the shrub-tree seedling stratum (Table 2.3-6), six species provided 42% total cover with a total density of 4,317 individuals per hectare. Symphoricarpos oreophilus and Amelanchier alnifolia shared dominance, providing 92% of the relative cover and 87% of the relative density. These species occurred at a constancy of 100% each.

In the herbaceous stratum (Table 2.3-7), 10 species contributed 1% total cover. The dominant species was a sedge, Carex geyeri, contributing a relative cover of 94% and occurring at a constancy of 100%.

Mixed Brush - The mixed brush type was sampled with five permanent and four non-permanent transects. Shrub and tree strata were measured on the non-permanent transects when present. A total of fifty 0.5-m^2 quadrat locations were used to sample the herbaceous stratum on the permanent transects. Two strata and 54 species were identified for the mixed brush type: 10 species in the shrub stratum and 44 species in the herbaceous stratum.

The mixed brush type was sampled over an elevational range of 2179 to 2621 m (7,150 to 8,600 ft), with an average elevation of 2467 m (8,093 ft). The mixed brush type is found equally distributed on all slope aspects, with an average slope of 18^{o}.

No trees occurred in the mature tree stratum, while in the shrub-tree seedling stratum (Table 2.3-8) 10 species provided 63% total cover and occurred at a density of 9,262 individuals per hectare. Amelanchier utahensis, Artemisia tridentata and Symphoricarpos oreophilus were the dominant shrub species, respectively providing a relative cover of 30, 30 and 18%. Highest constancy (100%) was also shared by these three species.

In the herbaceous stratum (Table 2.3-9), 44 species contributed 1% total cover. Carex geyeri was the dominant species, providing a relative cover of 33% and occurring at 40% constancy. Other highly constant species included Agropyron trachycaulum, Eriogonum umbellatum, Oryzopsis hymenoides and Hordeum brachyantherum.

Pinyon-Juniper - The pinyon-juniper type was sampled with seven permanent and eight non-permanent transects. Shrub and tree strata were measured on the non-permanent transects. A total of seventy 0.5-m^2 quadrat locations were used to sample the herbaceous stratum on the permanent transects. Three strata and 50 species were identified for the pinyon-juniper type: 2 species in the mature tree stratum, 10 species in the shrub stratum and 38 species in the herbaceous stratum. Juniperus osteosperma and Pinus edulis occurred in both the tree and shrub strata.

The pinyon-juniper type was sampled over an elevational range of 1798 to 2438 m (5,900 to 8,000 ft), with an average elevation of 2103 m (6,900 ft). The pinyon-juniper type is distributed equally on all slope aspects, with an average slope of 9°.

In the mature tree stratum (Table 2.3-10), two species, Pinus edulis and Juniperus osteosperma, contributed 23% total cover with a density of 337 individuals per hectare and a basal area of 31 m^2 per hectare. Pinus edulis contributed a slightly higher percent cover (14%) than Juniperus osteosperma (8%). Constancy of Pinus edulis was 88%, while Juniperus osteosperma was 75%.

In the shrub-tree seedling stratum (Table 2.3-11), 10 species provided 14% total cover and a total density of 3,687 individuals per hectare. Artemisia tridentata was the dominant species in all transects, providing a relative cover of 38%, relative density of 48% and occurring at a constancy of 100%. Other dominant species include Amelanchier utahensis, Purshia tridentata, Juniperus osteosperma and Pinus edulis.

In the herbaceous stratum (Table 2.3-12), 37 species and 1 unknown contributed $<$ 1% total cover. The dominant species were three grasses, Agropyron trachycaulum (25% relative cover), Poa sandbergii (37% relative cover) and Stipa comata (7% relative cover). The three dominants occurred at constancies of 100, 71 and 29%, respectively. Other species with high constancies included Oryzopsis hymenoides, Haplopappus nuttallii, Cryptantha sericea and Erigeron pumilis.

Sagebrush - The sagebrush type was sampled with seven permanent and eight non-permanent transects. Shrub and tree strata, when present, were measured on the non-permanent transects. A total of seventy 0.5-m^2 quadrat locations was used to sample the herbaceous stratum on the permanent transects. Two strata and 78 species were identified for the sagebrush type: 17 species in the shrub stratum and 61 species in the herbaceous stratum. Pinus edulis and Juniperus osteosperma occurred in the shrub stratum.

The sagebrush type was sampled over an elevational range of 1945 to 2621 m (6,380 to 8,600 ft), with an average elevation of 2178 m (7,148 ft) for the transects sampled. The sagebrush type is equally distributed on all slope aspects, with an average slope of 7°.

In the shrub stratum (Table 2.3-13), 17 species provided 49% total cover and a total density of 11,285 individuals per hectare. Artemisia tridentata was the dominant species, contributing 68% relative cover, 56% relative density and occurring at 100% constancy. Other species with a high constancy were Chrysothamnus viscidiflorus and Symphoricarpos oreophilus.

In the herbaceous stratum (Table 2.3-14), 60 species and 1 unknown contributed 2% total cover. The dominant species were Poa sandbergii (23% relative cover), Lupinus argenteus (9% relative cover) and Phlox multiflora (8% relative cover). The three species occurred at constancies of 71, 43 and 71%, respectively. Other species with high constancies include Agropyron smithii, Sphaeralcea coccinea, Descurainia richardsonii and Crepis acuminata.

Greasewood - The greasewood type was sampled with three permanent transects. A total of thirty 0.5-m^2 quadrats were used to sample only the herbaceous stratum. These permanent transects provide data on seasonal and annual vegetation changes for the herbaceous stratum, in which eleven species were encountered.

Greasewood occurs as small, isolated patches within the sagebrush stands. Greasewood is an indicator of saline-sodic soils and occurs on deep, well-drained soils formed in alluvial deposits with dependable groundwater.

The greasewood type was sampled over an elevational range of 1890 to 2134 m (6,200 to 7,000 ft), with an average elevation of 1996 m (6,550 ft). The greasewood type is distributed on north-, south- and east-facing slope aspects, with an average slope of 2°.

In the herbaceous stratum (Table 2.3-15), eleven species contributed 3% total cover. Descurainia richardsonii and Agropyron smithii were the dominant species, contributing a relative cover of 20 and 19% respectively. Other species with high constancies included Lappula redowski, Chenopodium leptophyllum and Chenopodium album.

Rabbitbrush - The rabbitbrush type was sampled with two permanent transects. A total of twenty 0.5-m^2 quadrats were used to sample only the herbaceous stratum. These permanent transects provide data on seasonal and annual vegetation changes for the herbaceous stratum, in which 13 species were encountered.

The rabbitbrush communities sampled in the study area represent a seral stage in the bottomland sagebrush. The high density rabbitbrush stands are the result of rapid invasion by rabbitbrush (Chrysothamnus spp.) species into abandoned agricultural or burned sites which were formerly dominated by Artemisia tridentata. The rabbitbrush type ranges elevationally from 1921 to 2098 m (6,300 to 6,800 ft), with an average elevation of 2015 m (6,610 ft). The rabbitbrush type is found on north-, south- and east-facing slope aspects, with an average slope of 1^{o}.

In the herbaceous stratum (Table 2.3-16), 13 species contributed 5% total cover. Elymus cinereus was the dominant species, contributing 74% relative cover and occurring at 100% constancy. Other species with high constancy values include: Bromus tectorum, Poa pratensis, Sitanion longifolium and Descurainia richardsonii.

Bald (Upland Meadow) - The bald type was sampled with two permanent and three non-permanent transects. Shrub and tree strata, when present, were measured on the non-permanent transects. A total of twenty 0.5-m^2 quadrats were used to sample the herbaceous stratum on the permanent transects. Two strata and 36 species were identified for the bald type: 5 species in the shrub stratum and 31 species in the herbaceous stratum.

The bald was sampled over an elevational range of 2231 to 2621 m (7,320 to 8,600 ft), with an average elevation of 2530 m (8,300 ft). The bald type is found predominantly on west- and south-facing slope aspects, with an average slope of 8^{o}.

In the shrub stratum (Table 2.3-17), five species provided 10% total cover and a total density of 5,550 individuals per hectare. Tetradymia canescens was the dominant species, providing 47% relative cover and occurring at 100% constancy. Other highly constant species include Artemisia tridentata and Chrysothamnus viscidiflorus.

In the herbaceous stratum (Table 2.3-18), 31 species contributed 3% total cover. Two species, Haplopappus acaulis (relative cover of 18%) and Poa sandbergii (relative cover of 16%), were the dominant species. Other highly constant species include Haplopappus nuttallii, Astragalus spatulatus, Penstemon caespitosus and Eriogonum lonchophyllum.

Shadscale - The shadscale type was sampled with two permanent transects. A total of twenty 0.5-m^2 quadrat locations was used to sample only the herbaceous stratum on the permanent transects. These permanent transects provide data on seasonal and annual vegetation changes for the herbaceous stratum. Ten species were found in the herbaceous stratum.

The shadscale type was sampled over an elevational range of 1969 to 2076 m (6,460 to 6,810 ft), with an average elevation of 2012 m (6,600 ft). The shadscale type occurred on south- and east-facing slope aspects, with an average slope of 17°.

In the herbaceous stratum (Table 2.3-19), 10 species contributed < 1% total cover. Mentzelia multiflora (relative cover of 53% and 100% constancy) and Eriogonum lonchophyllum (relative cover of 21% and 50% constancy) were the dominant species. Oryzopsis hymenoides was another highly constant species, occurring at a constancy of 100%.

Riparian - The riparian type was sampled with three permanent and two non-permanent transects. A total of thirty 0.5-m^2 quadrat locations on the three permanent transects were used to sample the herbaceous stratum. Shrub and tree strata, when present, were measured on the non-permanent transects. Two strata and 26 species were identified for the riparian type: 12 species in the shrub stratum and 14 species in the herbaceous stratum.

The riparian type was sampled over an elevational range of 1935 to 2316 m (6,350 to 7,600 ft), with an average of 2072 m (6,800 ft). The riparian type occurred on north-, south- and east-facing slope aspects, with an average slope of 3°.

In the shrub stratum (Table 2.3-20), 12 species contributed a total cover of 35% and a total density of 3,575 individuals per hectare. Artemisia tridentata (relative cover of 56% and 100% constancy) and Chrysothamnus nauseosus (relative cover of 18% and 100% constancy) were the dominant species.

In the herbaceous stratum (Table 2.3-21), 14 species contributed 7% total cover. Agropyron repens was the dominant species, providing 74% relative cover and occurring at 100% constancy. Other highly constant species include a Carex sp. and Taraxacum officinale.

Aspen, Table 2.3-2

MATURE TREE STRATUM-- ASPEN
SUMMARY-- 1 NON-PERM. TRANSECT(S)/TYPE 1975

SPECIES	*** RELATIVE *** COVER	DENSITY	FREQ	IMPORTANCE VALUE*	PER CENT COVER	* FREQUENCY ** MEAN (SD, N)	******* COVER ******** M2/HA (STD DEV, N)	***** DENSITY **** NO/HA (ST DEV, N)
POPULUS TREMULOIDES	100	96	83	279	30.86	100 (0, 1)	3086.00 (.00, 1)	383 (0, 1)
PSEUDOTSUGA MENZIESII (T)	0	4	17	21	.00	20 (0, 1)	.00 (.00, 1)	17 (0, 1)
ALL SPECIES					30.86		3086.00	400

SPECIES	MEAN INTERCEPT (CM) MEAN (STD ERR, N)	*************** HASAL AREA *************** RELATIVE	M2/HA (STD DEV, N)	IMP VAL**	CONSTANCY
POPULUS TREMULOIDES	220.43 (.00, 1)	87	4.0 (.00, 1)	267	100
PSEUDOTSUGA MENZIESII (T)	.00 (.00, 1)	13	1.0 (.00, 1)	33	20
ALL SPECIES			5.0		

NOTES: 1) IMPORTANCE VALUE IS PRESENTED AS (*)THE SUM OF RELATIVE COVER, DENSITY AND FREQUENCY, AND
(**)THE SUM OF RELATIVE HASAL AREA, DENSITY AND FREQUENCY.
2) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.

Aspen, Table 2.3-3

SHRUB-SEEDLING STRATUM-- ASPEN
SUMMARY-- 1 NON-PERM. TRANSECT(S)/TYPE 1975

SPECIES	*** RELATIVE *** COVER	DENSITY	FREQ	IMPORTANCE VALUE*	PER CENT COVER	* FREQUENCY ** MEAN (SD, N)	******* COVER ******** M2/HA (STD DEV, N)	***** DENSITY **** NO/HA (ST DEV, N)	MEAN INTERCEPT (CM) MEAN (STD ERR, N)	CONSTANCY
ARTEMISIA TRIDENTATA	3	14	20	37	1.45	80 (0, 1)	145.00 (.00, 1)	1100 (0, 1)	24.17 (.00, 1)	100
PRUNUS VIRGINIANA	12	8	10	30	5.79	40 (0, 1)	579.00 (.00, 1)	617 (0, 1)	57.90 (.00, 1)	100
AMELANCHIER UTAHENSIS	7	10	20	37	3.38	80 (0, 1)	338.00 (.00, 1)	800 (0, 1)	84.50 (.00, 1)	100
SYMPHORICARPOS OREOPHILUS	73	43	25	141	34.67	100 (0, 1)	3467.00 (.00, 1)	3467 (0, 1)	45.03 (.00, 1)	100
ROSA WOODSII	4	25	25	55	2.11	100 (0, 1)	211.00 (.00, 1)	2033 (0, 1)	15.07 (.00, 1)	100
					47.40		4740.00	8017		

NOTES: 1) IMPORTANCE VALUE = RELATIVE COVER + RELATIVE DENSITY + RELATIVE FREQUENCY.
2) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.

Aspen, Table 2.3-4

HERBACEOUS STRATUM-- ASPEN
SUMMARY-- 2 HERB TRANSECTS WITHIN TYPE-- ASPEN

SPECIES	RELATIVE COVER	PERCENT COVER	****** COVER ******* M2/HA (STD DEV, N)	**** DENSITY **** NO/HA (STD DEV,N)	RELATIVE FREQUENCY	PER CENT FREQUENCY MEAN (ST.DEV, N)	NUMBER /QUAD.	SOCIABILITY	CONSTANCY	IMPORTANCE VALUE
MERTENSIA CILIATA	3.40	.03	3.50 (4.95, 2)	15000 (21213, 2)	2.86	10.00 (14.14, 2)	.75	7.50	50	6
BROMUS MARGINATUS	15.53	.16	16.00 (4.24, 2)	ID (0, 2)	17.14	60.00 (14.14, 2)	ID	ID	100	33
GERANIUM RICHARDSONII	2.91	.03	3.00 (4.24, 2)	8000 (11314, 2)	4.29	15.00 (21.21, 2)	.40	2.67	50	7
GALIUM BOREALE	.97	.01	1.00 (.00, 2)	27000 (4243, 2)	7.14	25.00 (21.21, 2)	1.35	5.40	100	8
ACHILLEA LANULOSA	.00	.00	.00 (ID ,)	3000 (4243, 2)	1.43	5.00 (7.07, 2)	.15	3.00	50	1
THERMOPSIS MONTANA	2.43	.02	2.50 (2.12, 2)	34000 (33941, 2)	11.43	40.00 (28.28, 2)	1.70	4.25	100	14
VALERIANA OCCIDENTALIS	9.22	.09	9.50 (.71, 2)	44000 (25456, 2)	8.57	30.00 (14.14, 2)	2.20	7.33	100	18
CAREX GEYERI	52.91	.54	54.50 (4.95, 2)	ID (0, 2)	20.00	70.00 (14.14, 2)	ID	ID	100	73
AQUILEGIA CAERULEA	4.37	.04	4.50 (.71, 2)	5000 (1414, 2)	4.29	15.00 (7.07, 2)	.25	1.67	100	9
DELPHINIUM NELSONII	.00	.00	.00 (ID ,)	2000 (2828, 2)	1.43	5.00 (7.07, 2)	.10	2.00	50	1
FRAGARIA SP.	.97	.01	1.00 (1.41, 2)	5000 (7071, 2)	1.43	5.00 (7.07, 2)	.25	5.00	50	2
LIGUSTICUM PORTERI	6.31	.06	6.50 (6.36, 2)	66000 (48083, 2)	11.43	40.00 (42.43, 2)	3.30	8.25	100	18
Viola canadensis	.00	.00	.00 (ID ,)	3000 (4243, 2)	1.43	5.00 (7.07, 2)	.15	3.00	50	1
SMILACINA STELLATA	.49	.00	.50 (.71, 2)	15000 (21213, 2)	5.71	20.00 (28.28, 2)	.75	3.75	50	6
CIRSIUM SP.	.49	.00	.50 (.71, 2)	2000 (2828, 2)	1.43	5.00 (7.07, 2)	.10	2.00	50	2
ALL SPECIES		1.03	103.00	229000						

NOTES: 1) ID= INSUFFICIENT DATA, DENSITY DATA NOT COLLECTED FOR ALL SPECIES AND ALL TRANSECTS.
2) SOCIABILITY IS DEPENDENT UPON DENSITY DATA.
3) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.
4) IMPORTANCE VALUE EQUALS RELATIVE COVER PLUS RELATIVE FREQUENCY

Douglas-Fir, Table 2.3-5

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MATURE TREE STRATUM-- DOUGLAS-FIR
SUMMARY--   1 NON-PERM. TRANSECT(S)/TYPE 1975
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                                *** RELATIVE ***   IMPORTANCE PER CENT * FREQUENCY **  ******* COVER ********  ***** DENSITY ****
 SPECIES                        COVER DENSITY FREQ    VALUE*      COVER  MEAN ( SD, N )    M2/HA ( STD DEV, N )  NO/HA (ST DEV, N )
------------------------------------------------------------------------------------------------------------------------------------
PSEUDOTSUGA MENZIESII (T)        100     100   100      300       51.27   100 (  0,  1)  5127.00 (      .00,  1)    333 (      0,  1)

                                                                  51.27                   5127.00                     333
------------------------------------------------------------------------------------------------------------------------------------
                                 MEAN INTERCEPT (CM)    **************** BASAL  AREA ***************
 SPECIES                           MEAN (STD ERR, N )   RELATIVE   M2/HA  ( STD DEV, N ) IMP VAL**  CONSTANCY
------------------------------------------------------------------------------------------------------------------------------------
                                 512.70 (    .00,  1)     100        40.0 (     .00,  1)    300         100

     ALL SPECIES                                                     40.0
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NOTES: 1) IMPORTANCE VALUE IS PRESENTED AS (*)THE SUM OF RELATIVE COVER, DENSITY AND FREQUENCY, AND
          (**)THE SUM OF RELATIVE BASAL AREA, DENSITY AND FREQUENCY.
       2) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.
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Douglas-Fir, Table 2.3-6

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SHRUB-SEEDLING STRATUM-- DOUGLAS-FIR
SUMMARY--   1 NON-PERM. TRANSECT(S)/TYPE 1975
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                                *** RELATIVE ***   IMPORTANCE PER CENT * FREQUENCY **  ******* COVER ********  ***** DENSITY ****   MEAN INTERCEPT (CM) CONSTANCY
 SPECIES                        COVER DENSITY FREQ    VALUE*      COVER  MEAN ( SD, N )    M2/HA ( STD DEV, N )  NO/HA (ST DEV, N )    MEAN (STD ERR, N )
------------------------------------------------------------------------------------------------------------------------------------------------------
PSEUDOTSUGA MENZIESII (T)          4      10    28       41        1.55   100 (  0,  1)   155.00 (      .00,  1)    433 (      0,  1)   51.67 (    .00,  1)    100
ARTEMISIA TRIDENTATA               0       1     6        6         .00    20 (  0,  1)      .00 (      .00,  1)     33 (      0,  1)     .00 (    .00,  1)    100
QUERCUS GAMBELII                   4       2    11       17        1.80    40 (  0,  1)   180.00 (      .00,  1)     83 (      0,  1)   90.00 (    .00,  1)    100
SYMPHORICARPOS OREOPHILUS         55      75    28      158       23.24   100 (  0,  1)  2324.00 (      .00,  1)   3250 (      0,  1)   77.47 (    .00,  1)    100
AMELANCHIER ALNIFOLIA             37      12    22       71       15.50    80 (  0,  1)  1550.00 (      .00,  1)    500 (      0,  1)  103.33 (    .00,  1)    100
CEANOTHUS MARTINI                  0       0     6        6         .15    20 (  0,  1)    15.00 (      .00,  1)     17 (      0,  1)   15.00 (    .00,  1)    100

     ALL SPECIES                                                  42.24                   4224.00                    4317
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NOTES: 1) IMPORTANCE VALUE = RELATIVE COVER + RELATIVE DENSITY + RELATIVE FREQUENCY.
       2) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.
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Douglas-Fir, Table 2.3-7

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HERBACEOUS STRATUM-- DOUGLAS-FIR
SUMMARY--   2 HERB TRANSECTS WITHIN TYPE-- DOUGLAS-FIR
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                                RELATIVE  PERCENT   ****** COVER *******   **** DENSITY ****      RELATIVE  PER CENT FREQUENCY     NUMBER                          IMPORTANCE
          SPECIES                 COVER    COVER     M2/HA ( STD DEV,  N )  NO/HA (STD DEV,N )   FREQUENCY   MEAN (ST.DEV, N )     /QUAD. SOCIABILITY CONSTANCY   VALUE
--------------------------------------------------------------------------------------------------------------------------------------------------------
ASTRAGALUS TENELLUS               2.01      .03      3.00 (     4.24,  2)   9000 ( 12728,  2)      8.57    15.00 ( 21.21,  2)      .45      3.00        50          11
AGROPYRON TRACHYCAULUM            1.01      .01      1.50 (     2.12,  2)     ID (     0,  2)      2.86     5.00 (  7.07,  2)      ID        ID         50           4
LITHOSPERMUM RUDERALE              .34      .00       .50 (      .71,  2)   1000 (  1414,  2)      2.86     5.00 (  7.07,  2)      .05      1.00        50           3
CAREX GEYERI                     94.30     1.40    140.50 (    92.63,  2)     ID (     0,  2)     54.29    95.00 (  7.07,  2)      ID        ID        100         149
AQUILEGIA CAERULEA                 .34      .00       .50 (      .71,  2)  10000 (  8485,  2)      5.71    10.00 (   .00,  2)      .50      5.00       100           6
THERMOPSIS MONTANA                 .00      .00       .00 (   ID    ,   )   2000 (  2828,  2)      2.86     5.00 (  7.07,  2)      .10      2.00        50           3
GALIUM BOREALE                     .34      .00       .50 (      .71,  2)  10000 ( 14142,  2)      5.71    10.00 ( 14.14,  2)      .50      5.00        50           6
ACHILLEA LANULOSA                  .34      .00       .50 (      .71,  2)     ID (     0,  2)      2.86     5.00 (  7.07,  2)      ID        ID         50           3
Viola canadensis                   .34      .00       .50 (      .71,  2)   4000 (  5657,  2)      5.71    10.00 ( 14.14,  2)      .20      2.00        50           6
LIGUSTICUM PORTERI                1.01      .01      1.50 (     2.12,  2)   9000 ( 12728,  2)      8.57    15.00 ( 21.21,  2)      .45      3.00        50          10

     ALL SPECIES                          1.49    149.00                   45000
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NOTES: 1) ID= INSUFFICIENT DATA, DENSITY DATA NOT COLLECTED FOR ALL SPECIES AND ALL TRANSECTS.
       2) SOCIABILITY IS DEPENDENT UPON DENSITY DATA.
       3) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.
       4) IMPORTANCE VALUE EQUALS RELATIVE COVER PLUS RELATIVE FREQUENCY
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Mixed Brush, Table 2.3-8

SHRUB-SEEDLING STRATUM-- MIXED BRUSH
SUMMARY-- 4 NON-PERM, TRANSECT(S)/TYPE 1975

SPECIES	*** RELATIVE *** COVER	DENSITY	FREQ	IMPORTANCE VALUE*	PER CENT COVER	* FREQUENCY ** MEAN	(SD,	N)	******* COVER ******** M2/HA	(STD DEV,	N)	***** DENSITY **** NO/HA	(ST DEV,	N)	MEAN INTERCEPT (CM) MEAN	(STD ERR,	N)	CONSTANCY
JUNIPERUS OSTEOSPERMA	0	0	2	2	.00	10	(20,	4)	.00	(.00,	4)	8	(17,	4)	.00	(.00,	4)	25
PINUS EDULIS	0	0	1	1	.00	5	(10,	4)	.00	(.00,	4)	8	(17,	4)	.00	(.00,	4)	25
ARTEMISIA TRIDENTATA	30	50	20	101	18.97	100	(0,	4)	1897.50	(349.37,	4)	4617	(963,	4)	38.61	(4.36,	4)	100
CHRYSOTHAMNUS VISCIDIFLORUS	1	7	16	24	.79	80	(16,	4)	79.00	(92.65,	4)	629	(506,	4)	15.89	(5.51,	4)	100
PURSHIA TRIDENTATA	4	6	6	19	2.79	40	(43,	4)	279.50	(502.05,	4)	583	(1026,	4)	28.17	(17.02,	4)	75
QUERCUS GAMBELII	9	0	5	14	5.42	25	(30,	4)	542.50	(643.43,	4)	46	(63,	4)	121.58	(101.18,	4)	50
TETRADYMIA CANESCENS	0	0	3	3	.07	15	(19,	4)	7.00	(14.00,	4)	29	(48,	4)	3.50	(3.50,	4)	50
AMELANCHIER UTAHENSIS	38	16	20	74	23.59	100	(0,	4)	2359.50	(672.31,	4)	1471	(310,	4)	92.31	(22.42,	4)	100
SYMPHORICARPOS OREOPHILUS	18	20	20	58	10.96	100	(0,	4)	1096.50	(826.14,	4)	1858	(979,	4)	52.11	(14.54,	4)	100
OPUNTIA POLYACANTHA	0	0	3	3	.00	15	(30,	4)	.00	(.00,	4)	12	(25,	4)	.00	(.00,	4)	25
ALL SPECIES					62.61				6261.50			9262						

NOTES: 1) IMPORTANCE VALUE = RELATIVE COVER + RELATIVE DENSITY + RELATIVE FREQUENCY.
2) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.

Mixed Brush, Table 2.3-9

HERBACEOUS STRATUM-- MIXED BRUSH
SUMMARY-- 5 HERB TRANSECTS WITHIN TYPE-- MIXED BRUSH

SPECIES	RELATIVE COVER	PERCENT COVER	****** COVER ******* M2/HA	(STD DEV,	N)	**** DENSITY **** NO/HA	(STD DEV,	N)	RELATIVE FREQUENCY	PER CENT FREQUENCY MEAN	(ST.DEV,	N)	NUMBER /QUAD.	SOCIABILITY	CONSTANCY	IMPORTANCE VALUE
HAPLOPAPPUS NUTALLII	2.39	.02	2.40	(5.37,	5)	16000	(33586,	5)	6.71	22.00	(38.99,	5)	.80	3.64	40	9
PENSTEMON CAESPITOSUS	1.20	.01	1.20	(1.79,	5)	8800	(17527,	5)	4.88	16.00	(26.08,	5)	.44	2.75	40	6
AGROPYRON TRACHYCAULUM	9.96	.10	10.00	(14.00,	5)	ID	(0,	5)	9.15	30.00	(27.39,	5)	ID	ID	80	19
CLEMATIS HIRSUTISSIMA	.40	.00	.40	(.89,	5)	ID	(0,	5)	.61	2.00	(4.47,	5)	ID	ID	20	1
LINUM LEWISII	1.20	.01	1.20	(1.30,	5)	6400	(12116,	5)	4.27	14.00	(20.74,	5)	.32	2.29	60	5
ERIOGONUM UMBELLATUM	9.56	.10	9.60	(18.23,	5)	10800	(20813,	5)	6.71	22.00	(32.71,	5)	.54	2.45	80	16
PHYSARIA FLORIBUNDA	.20	.00	.20	(.45,	5)	2000	(4472,	5)	2.44	8.00	(17.89,	5)	.10	1.25	20	3
LITHOSPERMUM RUDERALE	.40	.00	.40	(.89,	5)	400	(894,	5)	.61	2.00	(4.47,	5)	.02	1.00	20	1
CREPIS ACUMINATA	.80	.01	.80	(.84,	5)	1600	(1673,	5)	2.44	8.00	(8.37,	5)	.08	1.00	60	3
PHLOX LONGIFOLIA	.20	.00	.20	(.45,	5)	5600	(9529,	5)	1.83	6.00	(8.94,	5)	.28	4.67	40	2
TARAXACUM OFFICINALE	.00	.00	.00	(ID ,	)	400	(894,	5)	.61	2.00	(4.47,	5)	.02	1.00	20	1
STIPA COMATA	3.19	.03	3.20	(7.16,	5)	ID	(0,	5)	3.05	10.00	(22.36,	5)	ID	ID	20	6
ORYZOPSIS HYMENOIDES	5.78	.06	5.80	(8.07,	5)	ID	(0,	5)	3.66	12.00	(13.04,	5)	ID	ID	60	9
POA SANDBERG	7.97	.08	8.00	(12.33,	5)	ID	(0,	5)	4.27	14.00	(19.49,	5)	ID	ID	40	12
ERIOGONUM LONCHOPHYLLUM	.20	.00	.20	(.45,	5)	400	(894,	5)	.61	2.00	(4.47,	5)	.02	1.00	20	1
CRYPTANTHA SERICEA	.60	.01	.60	(.55,	5)	3600	(4980,	5)	3.66	12.00	(13.04,	5)	.18	1.50	60	4
SENECIO SP.	1.59	.02	1.60	(2.30,	5)	4800	(7823,	5)	1.22	4.00	(5.48,	5)	.24	6.00	40	3
SISYMBRIUM LINIFOLIUM	.20	.00	.20	(.45,	5)	800	(1789,	5)	.61	2.00	(4.47,	5)	.04	2.00	20	1
OENOTHERA LAEVANDUFOLIA	.40	.00	.40	(.89,	5)	1200	(2683,	5)	.61	2.00	(4.47,	5)	.06	3.00	20	1
LOMATIUM ORIENTALE	.00	.00	.00	(ID ,	)	400	(894,	5)	.61	2.00	(4.47,	5)	.02	1.00	20	1
POA FENDLERIANA	2.39	.02	2.40	(5.37,	5)	ID	(0,	5)	1.83	6.00	(13.42,	5)	ID	ID	20	4
ERIGERON PUMILIS	1.20	.01	1.20	(2.17,	5)	4400	(8764,	5)	3.66	12.00	(21.68,	5)	.22	1.83	40	5
LUPINUS ARGENTEUS	1.20	.01	1.20	(1.79,	5)	1600	(2608,	5)	1.83	6.00	(8.94,	5)	.08	1.33	40	3
ANTENNARIA ROSEA	.40	.00	.40	(.89,	5)	1200	(2683,	5)	1.22	4.00	(8.94,	5)	.06	1.50	20	2
SPHAERALCEA COCCINEA	.20	.00	.20	(.45,	5)	1600	(3578,	5)	.61	2.00	(4.47,	5)	.08	4.00	20	1
HEDYSARUM BOREALE	.20	.00	.20	(.45,	5)	400	(894,	5)	.61	2.00	(4.47,	5)	.02	1.00	20	1
HEUCHERA SP.	.40	.00	.40	(.89,	5)	400	(894,	5)	.61	2.00	(4.47,	5)	.02	1.00	20	1
CAREX GEYERI	32.87	.33	33.00	(59.39,	5)	ID	(0,	5)	8.54	28.00	(43.82,	5)	ID	ID	40	41
COLLINSIA PARVIFLORA	.00	.00	.00	(ID ,	)	9200	(12775,	5)	3.05	10.00	(17.32,	5)	.46	4.60	40	3
OSMORHIZA DEPAUPERATA	2.59	.03	2.60	(5.81,	5)	2400	(5367,	5)	1.83	6.00	(13.42,	5)	.12	2.00	20	4
DELPHINIUM NELSONII	4.18	.04	4.20	(8.84,	5)	3600	(6066,	5)	3.66	12.00	(17.89,	5)	.18	1.50	40	8
HORDEUM BRACHYANTHERUM	3.39	.03	3.40	(3.44,	5)	5600	(6693,	5)	3.66	12.00	(16.43,	5)	.28	2.33	60	7
COMANDRA UMBELLATA	.40	.00	.40	(.89,	5)	4400	(9839,	5)	1.83	6.00	(13.42,	5)	.22	3.67	20	2
ASTER ARENOSUS	.20	.00	.20	(.45,	5)	400	(894,	5)	.61	2.00	(4.47,	5)	.02	1.00	20	1
VIGUIERA MULTIFLORA	1.39	.01	1.40	(3.13,	5)	1200	(2683,	5)	1.22	4.00	(8.94,	5)	.06	1.50	20	3
IPOMOPSIS AGGREGATA	.20	.00	.20	(.45,	5)	400	(894,	5)	.61	2.00	(4.47,	5)	.02	1.00	20	1
ASTRAGALUS PURSHII	.20	.00	.20	(.45,	5)	400	(894,	5)	.61	2.00	(4.47,	5)	.02	1.00	20	1
LITHOSPERMUM INCISUM	.00	.00	.00	(ID ,	)	400	(894,	5)	.61	2.00	(4.47,	5)	.02	1.00	20	1
POLYGONUM SAWATCHENSE	.20	.00	.20	(.45,	5)	4800	(10733,	5)	.61	2.00	(4.47,	5)	.24	12.00	20	1
AGOSERIS GLAUCA	.20	.00	.20	(.45,	5)	1200	(2683,	5)	.61	2.00	(4.47,	5)	.06	3.00	20	1
GALIUM BOREALE	.20	.00	.20	(.45,	5)	2400	(5367,	5)	1.22	4.00	(8.94,	5)	.12	3.00	20	1
PENSTEMON FREMONTII	.60	.01	.60	(1.34,	5)	800	(1789,	5)	1.22	4.00	(8.94,	5)	.04	1.00	20	2
ACHILLEA LANULOSA	.20	.00	.20	(.45,	5)	1200	(2683,	5)	.61	2.00	(4.47,	5)	.06	3.00	20	1
BALSAMORHIZA SAGITTATA	1.00	.01	1.00	(2.24,	5)	400	(894,	5)	.61	2.00	(4.47,	5)	.02	1.00	20	2
ALL SPECIES		1.00	100.40			111600										

NOTES: 1) ID= INSUFFICIENT DATA. DENSITY DATA NOT COLLECTED FOR ALL SPECIES AND ALL TRANSECTS.
2) SOCIABILITY IS DEPENDENT UPON DENSITY DATA.
3) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.
4) IMPORTANCE VALUE EQUALS RELATIVE COVER PLUS RELATIVE FREQUENCY

Pinyon-Juniper, Table 2.3-10

MATURE TREE STRATUM-- PINYON-JUNIPER
SUMMARY-- 8 NON-PERM. TRANSECT(S)/TYPE 1975

SPECIES	*** RELATIVE *** COVER	DENSITY	FREQ	IMPORTANCE VALUE*	PER CENT COVER	* FREQUENCY ** MEAN (SD, N)	******* COVER ******** M2/HA (STD DEV, N)	***** DENSITY **** NO/HA (ST DEV, N)
JUNIPERUS OSTEOSPERMA	37	41	47	125	8.45	67 (44, 8)	844.87 (930.89, 8)	137 (109, 8)
PINUS EDULIS	63	59	53	175	14.11	77 (35, 8)	1411.12 (1094.64, 8)	200 (156, 8)
ALL SPECIES					22.56		2256.00	337

SPECIES	MEAN INTERCEPT (CM) MEAN (STD ERR, N)	**************** BASAL AREA *************** RELATIVE	M2/HA (STD DEV, N)	IMP VAL**	CONSTANCY
JUNIPERUS OSTEOSPERMA	182.35 (49.26, 8)	76	240 (.21, 8)	163	75
PINUS EDULIS	198.22 (34.71, 8)	24	8.0 (.06, 8)	137	88
ALL SPECIES			310		

NOTES: 1) IMPORTANCE VALUE IS PRESENTED AS (*)THE SUM OF RELATIVE COVER, DENSITY AND FREQUENCY, AND
(**)THE SUM OF RELATIVE BASAL AREA, DENSITY AND FREQUENCY.
2) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.

Pinyon-Juniper, Table 2.3-11

SHRUB-SEEDLING STRATUM-- PINYON-JUNIPER
SUMMARY-- 8 NON-PERM. TRANSECT(S)/TYPE 1975

SPECIES	*** RELATIVE *** COVER	DENSITY	FREQ	IMPORTANCE VALUE*	PER CENT COVER	* FREQUENCY ** MEAN (SD, N)	******* COVER ******** M2/HA (STD DEV, N)	***** DENSITY **** NO/HA (ST DEV, N)	MEAN INTERCEPT (CM) MEAN (STD ERR, N)	CONSTANCY
JUNIPERUS OSTEOSPERMA	5	2	9	16	.65	42 (38, 8)	65.25 (121.48, 8)	65 (71, 8)	54.19 (42.24, 8)	63
PINUS EDULIS	4	7	19	30	.54	85 (21, 8)	54.25 (112.16, 8)	250 (134, 8)	21.65 (10.20, 8)	100
ARTEMISIA TRIDENTATA	38	48	16	102	5.22	72 (35, 8)	522.37 (786.50, 8)	1767 (1888, 8)	25.66 (7.50, 8)	100
ATRIPLEX CONFERTIFOLIA	1	1	1	2	.10	2 (7, 8)	10.25 (28.99, 8)	42 (118, 8)	5.42 (5.42, 8)	13
CHRYSOTHAMNUS VISCIDIFLORUS	2	9	12	23	.33	52 (43, 8)	33.25 (57.15, 8)	340 (332, 8)	11.56 (7.90, 8)	75
PURSHIA TRIDENTATA	20	12	13	45	2.69	57 (41, 8)	269.12 (440.37, 8)	454 (663, 8)	31.13 (15.27, 8)	75
TETRADYMIA CANESCENS	0	1	4	5	.00	17 (23, 8)	.00 (.00, 8)	31 (47, 8)	.00 (.00, 8)	50
AMELANCHIER UTAHENSIS	28	8	9	46	3.85	42 (47, 8)	384.62 (714.01, 8)	294 (456, 8)	30.01 (19.76, 8)	50
SYMPHORICARPOS OREOPHILUS	1	4	5	10	.14	22 (42, 8)	14.13 (35.35, 8)	131 (248, 8)	4.03 (2.75, 8)	25
OPUNTIA POLYACANTHA	1	8	11	20	.10	50 (40, 8)	9.88 (13.04, 8)	308 (455, 8)	5.38 (2.18, 8)	75
ALL SPECIES					13.65		1365.25	3687		

NOTES: 1) IMPORTANCE VALUE = RELATIVE COVER + RELATIVE DENSITY + RELATIVE FREQUENCY.
2) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.

Pinyon-Juniper, Table 2.3-12

HERBACEOUS STRATUM-- PINYON-JUNIPER
SUMMARY-- 7 HERB TRANSECTS WITHIN TYPE-- PINYON-JUNIPER

SPECIES	RELATIVE COVER	PERCENT COVER	****** COVER ******* M2/HA (STD DEV, N)	**** DENSITY **** NO/HA (STD DEV,N)	RELATIVE FREQUENCY	PER CENT FREQUENCY MEAN (ST.DEV, N	MEAN Z. A.	SOCIABILITY	CONSTANCY	IMPORTANCE VALUE
AGROPYRON TRACHYCAULUM	24.77	.20	19.57 (19.09, 7)	ID (0, 7)	19.55	61.43 (16.76, 7)	ID	ID	100	44
ORYZOPSIS HYMENOIDES	4.34	.03	3.43 (2.88, 7)	ID (0, 7)	5.00	15.71 (9.76, 7)	ID	ID	86	9
ERIOGONUM UMBELLATUM	1.27	.01	1.00 (2.65, 7)	4286 (11339, 7)	.91	2.86 (7.56, 7)	.21	7.50	14	2
SITANION LONGIFOLIUM	1.08	.01	.86 (2.27, 7)	ID (0, 7)	1.82	5.71 (15.12, 7)	ID	ID	14	3
PENSTEMON CAESPITOSUS	.36	.00	.29 (.76, 7)	1429 (2992, 7)	1.36	4.29 (7.87, 7)	.07	1.67	29	2
PHLOX HOODII	5.61	.04	4.43 (5.00, 7)	9143 (9788, 7)	7.73	24.29 (25.07, 7)	.46	1.88	71	13
ERIGERON PUMILIS	2.17	.02	1.71 (3.68, 7)	5143 (8630, 7)	2.73	8.57 (9.00, 7)	.26	3.00	57	5
SENECIO INTEGERRIMUS	.00	.00	.00 (ID ,)	1143 (3024, 7)	.91	2.86 (7.56, 7)	.06	2.00	14	1
POA SANDBERG	36.53	.29	28.86 (47.55, 7)	ID (0, 7)	10.45	32.86 (32.51, 7)	ID	ID	71	47
ANTENNARIA SP.	.00	.00	.00 (ID ,)	857 (2268, 7)	.91	2.86 (7.56, 7)	.04	1.50	14	1
CREPIS ACUMINATA	.18	.00	.14 (.38, 7)	1714 (3729, 7)	2.27	7.14 (13.96, 7)	.19	1.25	29	2
CRYPTANTHA SERICEA	2.89	.02	2.29 (2.36, 7)	9714 (7697, 7)	7.73	24.29 (15.12, 7)	.49	2.10	86	11
SPHAERALCEA COCCINEA	.36	.00	.29 (.76, 7)	8571 (16920, 7)	2.27	7.14 (11.13, 7)	.43	6.00	43	3
ASTRAGALUS PURSHII	.18	.00	.14 (.38, 7)	1143 (1574, 7)	1.36	4.29 (5.55, 7)	.06	1.33	43	2
HAPLOPAPPUS NUTTALLII	2.53	.02	2.00 (2.24, 7)	5143 (4451, 7)	5.91	18.57 (13.45, 7)	.26	1.36	71	8
STIPA COMATA	6.51	.05	5.14 (11.94, 7)	ID (0, 7)	4.09	12.86 (22.15, 7)	ID	ID	29	11
ASTRAGALUS CHAMAELEUCE	.00	.00	.00 (ID ,)	286 (756, 7)	.45	1.43 (3.78, 7)	.01	1.00	14	
ARENARIA FENDLERI	.36	.00	.29 (.49, 7)	1429 (2507, 7)	1.36	4.29 (7.87, 7)	.07	1.67	29	2
IPOMOPSIS CONGESTA	.36	.00	.29 (.76, 7)	1143 (3024, 7)	1.36	4.29 (11.34, 7)	.06	1.33	14	2
CHAENACTIS DOUGLASII	.36	.00	.29 (.76, 7)	571 (1512, 7)	.91	2.86 (7.56, 7)	.03	1.00	14	1
ERIOGONUM LONCHOPHYLLUM	2.17	.02	1.71 (3.40, 7)	7429 (16400, 7)	4.09	12.86 (25.60, 7)	.37	2.89	29	6
UNKNOWN	.00	.00	.00 (ID ,)	ID (0, 7)	.91	2.86 (7.56, 7)	ID	ID	14	1
STREPTANTHUS CORDATUS	.18	.00	.14 (.38, 7)	286 (756, 7)	.45	1.43 (3.78, 7)	.01	1.00	14	1
PHYSARIA FLORIBUNDA	.18	.00	.14 (.38, 7)	1143 (1952, 7)	1.36	4.29 (7.87, 7)	.06	1.33	29	2
DESCURAINIA RICHARDSONII	.00	.00	.00 (ID ,)	3143 (7471, 7)	1.82	5.71 (11.34, 7)	.16	2.75	29	2
EUPHORBIA FENDLERI	.18	.00	.14 (.38, 7)	1143 (3024, 7)	1.36	4.29 (11.34, 7)	.06	1.33	14	2
LOMATIUM ORIENTALE	.00	.00	.00 (ID ,)	1714 (2138, 7)	1.36	4.29 (5.55, 7)	.09	2.00	43	1
POA CANBYI	.18	.00	.14 (.38, 7)	ID (0, 7)	.45	1.43 (3.78, 7)	ID	ID	14	1
TRIFOLIUM GYMNOCARPON	1.08	.01	.86 (1.57, 7)	4286 (7521, 7)	3.18	10.00 (19.15, 7)	.21	2.14	29	4
AGROPYRON SMITHII	.18	.00	.14 (.38, 7)	ID (0, 7)	.45	1.43 (3.78, 7)	ID	ID	14	1
ANTENNARIA PARVIFOLIA	.18	.00	.14 (.38, 7)	286 (756, 7)	.45	1.43 (3.78, 7)	.01	1.00	14	1
CAREX SP.	1.63	.01	1.29 (2.21, 7)	ID (0, 7)	1.36	4.29 (7.87, 7)	ID	ID	29	3
BROMUS TECTORUM	3.62	.03	2.86 (7.56, 7)	ID (0, 7)	.45	1.43 (3.78, 7)	ID	ID	14	4
PHLOX LONGIFOLIA	.18	.00	.14 (.38, 7)	2571 (6803, 7)	1.36	4.29 (11.34, 7)	.13	3.00	14	2
DELPHINIUM NELSONII	.00	.00	.00 (ID ,)	286 (756, 7)	.45	1.43 (3.78, 7)	.01	1.00	14	0
SISYMBRIUM LINIFOLIUM	.00	.00	.00 (ID ,)	571 (1512, 7)	.45	1.43 (3.78, 7)	.03	2.00	14	0
ANTENNARIA MICROPHYLLA	.18	.00	.14 (.38, 7)	1714 (4536, 7)	.45	1.43 (3.78, 7)	.09	6.00	14	1
BALSAMORHIZA SAGITTATA	.18	.00	.14 (.38, 7)	286 (756, 7)	.45	1.43 (3.78, 7)	.01	1.00	14	1
ALL SPECIES		.79	79.00	76571						

NOTES: 1) ID= INSUFFICIENT DATA. DENSITY DATA NOT COLLECTED FOR ALL SPECIES AND ALL TRANSECTS.
2) SOCIABILITY IS DEPENDENT UPON DENSITY DATA.
3) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.
4) IMPORTANCE VALUE EQUALS RELATIVE COVER PLUS RELATIVE FREQUENCY

Sagebrush, Table 2.3-13

SHRUB-SEEDLING STRATUM-- SAGEBRUSH
SUMMARY-- 8 NON-PERM. TRANSECT(S)/TYPE 1975

SPECIES	*** RELATIVE ***			IMPORTANCE	PER CENT	* FREQUENCY **	******* COVER ********	***** DENSITY ****	MEAN INTERCEPT (CM)	CONSTANCY
	COVER	DENSITY	FREQ	VALUE*	COVER	MEAN (SD, N)	M2/HA (STD DEV, N)	NO/HA (ST DEV, N)	MEAN (STD ERR, N)	
JUNIPERUS OSTEOSPERMA	0	0	1	1	.00	5 (14, 8)	.00 (.00, 8)	4 (12, 8)	.00 (.00, 8)	13
PINUS EDULIS	0	0	1	1	.05	2 (7, 8)	4.88 (13.79, 8)	2 (6, 8)	4.88 (4.88, 8)	13
ARTEMISIA TRIDENTATA	68	56	27	151	33.11	100 (0, 8)	3310.62 (969.68, 8)	6331 (2669, 8)	60.83 (5.34, 8)	100
ATRIPLEX CANESCENS	1	1	3	5	.56	13 (35, 8)	55.75 (157.68, 8)	81 (230, 8)	13.94 (13.94, 8)	13
ATRIPLEX CONFERTIFOLIA	1	1	3	5	.51	13 (35, 8)	51.37 (145.31, 8)	79 (224, 8)	5.14 (5.14, 8)	13
CHRYSOTHAMNUS NAUSEOSUS	9	6	7	22	4.28	27 (40, 8)	426.12 (826.18, 8)	706 (1755, 8)	31.37 (20.24, 8)	37
CHRYSOTHAMNUS VISCIDIFLORUS	9	17	16	42	4.39	60 (45, 8)	439.50 (963.20, 8)	1944 (2268, 8)	19.88 (9.01, 8)	75
EUROTIA LANATA	0	1	5	6	.02	17 (33, 8)	2.50 (7.07, 8)	165 (446, 8)	.83 (.83, 8)	25
SARCOBATUS VERMICULATUS	2	2	4	7	.83	15 (30, 8)	83.25 (235.47, 8)	192 (490, 8)	4.90 (4.90, 8)	25
TETRADYMIA CANESCENS	0	1	5	6	.04	17 (29, 8)	3.75 (10.61, 8)	119 (273, 8)	1.87 (1.47, 8)	37
AMELANCHIER UTAHENSIS	0	0	3	3	.08	10 (21, 8)	8.50 (21.35, 8)	21 (53, 8)	3.42 (2.57, 8)	25
SYMPHORICARPOS OREOPHILUS	6	4	11	22	2.93	42 (42, 8)	293.50 (557.84, 8)	502 (875, 8)	26.74 (10.71, 8)	63
AMELANCHIER ALNIFOLIA	0	1	3	3	.14	10 (28, 8)	13.75 (38.89, 8)	58 (165, 8)	13.75 (13.75, 8)	13
CHRYSOTHAMNUS DEPRESSUS	4	8	3	15	1.78	13 (35, 8)	178.12 (503.81, 8)	862 (2440, 8)	11.87 (11.87, 8)	13
OPUNTIA POLYACANTHA	0	0	3	3	.00	10 (28, 8)	.00 (.00, 8)	12 (35, 8)	.00 (.00, 8)	13
RIBES AUREUM	1	2	3	6	.25	13 (28, 8)	25.25 (71.42, 8)	202 (552, 8)	2.53 (2.53, 8)	25
ROSA WOODSII	0	0	1	1	.00	5 (9, 8)	.00 (.00, 8)	4 (8, 8)	.00 (.00, 8)	25
					48.99		4898.87	11285		

NOTES: 1) IMPORTANCE VALUE = RELATIVE COVER + RELATIVE DENSITY + RELATIVE FREQUENCY.
2) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.

Sagebrush, Table 2.3-14

HERBACEOUS STRATUM-- SAGEBRUSH
SUMMARY-- 7 HERB TRANSECTS WITHIN TYPE-- SAGEBRUSH

SPECIES	RELATIVE	PERCENT	****** COVER *******	**** DENSITY ****	RELATIVE	PER CENT FREQUENCY	NUMBER			IMPORTANCE
	COVER	COVER	M2/HA (STD DEV, N)	NO/HA (STD DEV,N)	FREQUENCY	MEAN (ST.DEV, N)	/QUAD.	SOCIABILITY	CONSTANCY	VAL.
PHLOX HOODII	2.00	.04	3.86 (10.21, 7)	4000 (10583, 7)	1.71	8.57 (22.68, 7)	.20	2.33	14	4
IPOMOPSIS CONGESTA	.22	.00	.43 (1.13, 7)	1143 (3024, 7)	.28	1.43 (3.78, 7)	.06	4.00	14	1
ASTRAGALUS CHAMAELEUCE	.07	.00	.14 (.38, 7)	857 (2268, 7)	.57	2.86 (7.56, 7)	.04	1.50	14	1
HAPLOPAPPUS NUTTALLII	.15	.00	.29 (.76, 7)	857 (2268, 7)	.28	1.43 (3.78, 7)	.04	3.00	14	[illegible]
ORYZOPSIS HYMENOIDES	1.86	.04	3.57 (8.60, 7)	ID (0, 7)	2.28	11.43 (26.10, 7)	ID	ID	29	4
ERIOGONUM OVALIFOLIUM	.07	.00	.14 (.38, 7)	571 (1512, 7)	.57	2.86 (7.56, 7)	.03	1.00	14	1
SPHAERALCEA COCCINEA	.30	.01	.57 (.98, 7)	8286 (13487, 7)	2.85	14.29 (22.99, 7)	.41	2.40	43	3
CRYPTANTHA SERICEA	1.41	.03	2.71 (5.96, 7)	2857 (5014, 7)	2.28	11.43 (20.35, 7)	.14	1.25	29	4
POA SANDBERG	23.01	.44	44.29 (73.95, 7)	ID (0, 7)	8.28	41.43 (43.37, 7)	ID	ID	71	31
AGROPYRON SMITHII	9.80	.19	18.86 (38.15, 7)	ID (0, 7)	3.99	20.00 (26.46, 7)	ID	ID	57	14
STIPA COMATA	1.04	.02	2.00 (5.21, 7)	ID (0, 7)	1.99	10.00 (14.14, 7)	ID	ID	43	3
PHLOX LONGIFOLIA	1.48	.03	2.86 (3.39, 7)	22000 (25325, 7)	4.56	22.86 (20.59, 7)	1.10	4.81	71	6
SISYMBRIUM LINIFOLIUM	.67	.01	1.29 (2.21, 7)	8286 (12880, 7)	2.28	11.43 (16.64, 7)	.41	5.63	43	[illegible]
PHLOX MULTIFLORA	7.80	.15	15.00 (39.69, 7)	3429 (9071, 7)	.85	4.29 (11.34, 7)	.17	4.00	14	[illegible]
TRIFOLIUM GYMNOCARPON	2.45	.05	4.71 (8.10, 7)	13429 (22999, 7)	3.99	20.00 (34.16, 7)	.67	3.36	29	[illegible]
LUPINUS ARGENTEUS	9.28	.18	17.86 (39.55, 7)	29143 (60220, 7)	5.41	27.14 (39.48, 7)	1.46	5.37	43	[illegible]
ERIGERON EATONII	.07	.00	.14 (.38, 7)	857 (2268, 7)	.28	1.43 (3.78, 7)	.04	3.00	14	
CREPIS OCCIDENTALIS	.15	.00	.29 (.76, 7)	1143 (3024, 7)	.28	1.43 (3.78, 7)	.06	4.00	14	[illegible]
LOMATIUM ORIENTALE	.52	.01	1.00 (1.91, 7)	5143 (10511, 7)	1.99	10.00 (19.15, 7)	.26	2.57	29	3
AGOSERIS GLAUCA	.22	.00	.43 (.79, 7)	6857 (13158, 7)	1.99	10.00 (14.14, 7)	.34	3.43	43	[illegible]
AGROPYRON TRACHYCAULUM	2.82	.05	5.43 (7.79, 7)	ID (0, 7)	4.84	24.29 (30.47, 7)	ID	ID	57	[illegible]
PENSTEMON CAESPITOSUS	3.19	.06	6.14 (16.25, 7)	4000 (10583, 7)	1.99	10.00 (26.46, 7)	.20	[illegible]	14	[illegible]
ZYGADENUS PANICULATUS	.07	.00	.14 (.38, 7)	571 (1512, 7)	.57	2.86 (7.56, 7)	.03	1.00	14	[illegible]
DELPHINIUM NELSONII	.07	.00	.14 (.38, 7)	1429 (2992, 7)	1.14	5.71 (11.34, 7)	.07	1.25	29	
CREPIS ACUMINATA	.74	.01	1.43 (2.94, 7)	5429 (8997, 7)	2.85	14.29 (22.99, 7)	.27	1.90	43	
PENSTEMON SP.	.82	.02	1.57 (4.16, 7)	1714 (4536, 7)	1.42	7.14 (18.90, 7)	.09	1.20	14	
SENECIO INTEGERRIMUS	2.15	.04	4.14 (9.32, 7)	10857 (27003, 7)	2.28	11.43 (25.10, 7)	.54	4.75	29	
ASTRAGALUS PURSHII	.30	.01	.57 (.98, 7)	857 (2268, 7)	.85	4.29 (7.87, 7)	.04	1.00	29	[illegible]
ERIGERON PUMILUS	.67	.01	1.29 (3.40, 7)	9429 (23230, 7)	3.13	15.71 (33.54, 7)	.47	5.00	29	[illegible]
CASTILLEJA CHROMOSA	.37	.01	.71 (1.50, 7)	2857 (4598, 7)	2.28	11.43 (18.64, 7)	.14	1.25	43	[illegible]
ANTENNARIA MICROPHYLLA	.00	.00	.00 (ID ,)	286 (756, 7)	.28	1.43 (3.78, 7)	.01	1.00	14	[illegible]
IPOMOPSIS AGGREGATA	.15	.00	.29 (.76, 7)	571 (1512, 7)	.57	2.86 (7.56, 7)	.03	1.00	14	[illegible]
PHYSARIA FLORIBUNDA	.15	.00	.29 (.76, 7)	1714 (3729, 7)	.85	4.29 (7.87, 7)	.09	2.00	29	[illegible]
HEDYSARUM BOREALE	.89	.02	1.71 (4.54, 7)	286 (756, 7)	.28	1.43 (3.78, 7)	.01	1.00	14	[illegible]
CAREX GEYERI	4.75	.09	9.14 (24.19, 7)	ID (0, 7)	1.71	8.57 (22.68, 7)	ID	ID	14	[illegible]
CALOCHORTUS SP.	.00	.00	.00 (ID ,)	286 (756, 7)	.28	1.43 (3.78, 7)	.01	1.00	14	[illegible]
ERIOGONUM UMBELLATUM	1.26	.02	2.43 (6.43, 7)	4000 (10583, 7)	1.42	7.14 (18.90, 7)	.20	2.80	14	[illegible]
BROMUS MARGINATUS	3.79	.07	7.29 (19.28, 7)	ID (0, 7)	2.28	11.43 (30.24, 7)	ID	ID	14	6
SOLIDAGO SP.	.30	.01	.57 (1.51, 7)	8571 (22678, 7)	.57	2.86 (7.56, 7)	.43	15.00	14	1
GALIUM BOREALE	1.04	.02	2.00 (5.29, 7)	15429 (40820, 7)	1.14	5.71 (15.12, 7)	.77	13.50	14	2
GERANIUM RICHARDSONII	.89	.02	1.71 (4.54, 7)	1714 (4536, 7)	1.14	5.71 (15.12, 7)	.09	1.50	14	2
ACHILLEA LANULOSA	.07	.00	.14 (.38, 7)	2571 (6803, 7)	.57	2.86 (7.56, 7)	.13	4.50	14	1
TARAXACUM OFFICINALE	.30	.01	.57 (1.13, 7)	1429 (2992, 7)	.85	4.29 (7.87, 7)	.07	1.67	29	1
VICIA AMERICANA	.15	.00	.29 (.76, 7)	2286 (6047, 7)	.85	4.29 (11.34, 7)	.11	2.67	14	1
COMANDRA UMBELLATA	.22	.00	.43 (1.13, 7)	4571 (12095, 7)	.28	1.43 (3.78, 7)	.23	16.00	14	1
POA FENDLERIANA	1.04	.02	2.00 (5.29, 7)	ID (0, 7)	.57	2.86 (7.56, 7)	ID	ID	14	2
MERTENSIA CILIATA	.07	.00	.14 (.38, 7)	286 (756, 7)	.28	1.43 (3.78, 7)	.01	1.00	14	0
SITANION LONGIFOLIUM	3.12	.06	6.00 (15.01, 7)	ID (0, 7)	2.56	12.86 (17.04, 7)	ID	ID	43	6
LAPPULA REDOWSKII	.07	.00	.14 (.38, 7)	1714 (4536, 7)	1.14	5.71 (15.12, 7)	.09	1.50	14	1
SENECIO MULTILOBATUS	.00	.00	.00 (ID ,)	286 (756, 7)	.28	1.43 (3.78, 7)	.01	1.00	14	0
DESCURAINIA RICHARDSONII	2.00	.04	3.86 (7.88, 7)	84571 (150947, 7)	3.42	17.14 (26.28, 7)	4.23	24.67	43	5
CHENOPODIUM LEPTOPHYLLUM	.07	.00	.14 (.38, 7)	8000 (13711, 7)	1.14	5.71 (11.34, 7)	.40	7.00	29	1
BROMUS TECTORUM	.00	.00	.00 (ID ,)	ID (0, 7)	.28	1.43 (3.78, 7)	ID	ID	14	0
ANTENNARIA PARVIFOLIA	.15	.00	.29 (.76, 7)	2286 (6047, 7)	.57	2.86 (7.56, 7)	.11	4.00	14	1
LEPIDIUM MONTANUM	.59	.01	1.14 (2.27, 7)	47714 (121888, 7)	2.28	11.43 (26.10, 7)	2.39	20.87	29	3
CHENOPODIUM ALBUM	.15	.00	.29 (.49, 7)	20000 (34332, 7)	2.85	14.29 (24.92, 7)	1.00	7.00	29	3
VIOLA NUTTALLII	.22	.00	.43 (.79, 7)	571 (976, 7)	.57	2.86 (4.88, 7)	.03	1.00	29	1
ELYMUS CINEREUS	4.66	.09	9.00 (23.81, 7)	ID (0, 7)	1.14	5.71 (15.12, 7)	ID	ID	14	6
POA PRATENSIS	.07	.00	.14 (.38, 7)	ID (0, 7)	.57	2.86 (7.56, 7)	ID	ID	14	1
UNKNOWN	.00	.00	.00 (ID ,)	1429 (3780, 7)	.57	2.86 (7.56, 7)	.07	2.50	14	1
CHENOPODIUM SP.	.00	.00	.00 (ID ,)	1429 (3780, 7)	.57	2.86 (7.56, 7)	.07	2.50	14	1
ALL SPECIES		1.92	192.43	356000						

NOTES: 1) ID= INSUFFICIENT DATA. DENSITY DATA NOT COLLECTED FOR ALL SPECIES AND ALL TRANSECTS.
2) SOCIABILITY IS DEPENDENT UPON DENSITY DATA.
3) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.
4) IMPORTANCE VALUE EQUALS RELATIVE COVER PLUS RELATIVE FREQUENCY

Greasewood, Table 2.3-15

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HERBACEOUS STRATUM-- GREASEWOOD
SUMMARY--    3 HERB TRANSECTS WITHIN TYPE-- GREASEWOOD
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                                 RELATIVE  PERCENT   ****** COVER *******    **** DENSITY ****    RELATIVE  PER CENT FREQUENCY    NUMBER                          IMPORTANCE
          SPECIES                 COVER     COVER     M2/HA ( STD DEV,  N )   NO/HA (STD DEV,N )  FREQUENCY  MEAN (ST.DEV, N )    /QUAD. SOCIABILITY CONSTANCY   VALUE
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------
BROMUS TECTORUM                   11.46      .40      40.00 (     69.28,  3)     ID  (      0,  3)     6.80     23.33 ( 40.41,  3)     ID        ID         33          18
CHENOPODIUM LEPTOPHYLLUM           6.30      .22      22.00 (     26.21,  3)  326667 (398037,  3)     9.71     33.33 ( 41.63,  3)   16.33     49.00        67          16
DESCURAINIA RICHARDSONII          20.06      .70      70.00 (     71.04,  3)  868000 (931079,  3)    22.33     76.67 ( 23.09,  3)   43.40     56.61       100          42
LAPPULA REDOWSKII                  5.54      .19      19.33 (     22.68,  3)  204000 (262930,  3)    13.59     46.67 ( 20.82,  3)   10.20     21.86       100          19
AGROPYRON SMITHII                 18.62      .65      65.00 (     99.60,  3)     ID  (      0,  3)    14.56     50.00 ( 43.59,  3)     ID        ID        100          33
ELYMUS CINEREUS                     .29      .01       1.00 (      1.73,  3)     ID  (      0,  3)      .97      3.33 (  5.77,  3)     ID        ID         33           1
KOCHIA IRANICA                     8.40      .29      29.33 (     50.81,  3)  533333 (923760,  3)     6.80     23.33 ( 40.41,  3)   26.67    114.29        33          15
AGROPYRON DESERTORUM              16.33      .57      57.00 (     98.73,  3)     ID  (      0,  3)     8.74     30.00 ( 51.96,  3)     ID        ID         33          25
CHENOPODIUM ALBUM                 10.70      .37      37.33 (     47.65,  3)  397333 (437385,  3)    11.65     40.00 ( 45.83,  3)   19.87     49.67        67          22
LEPIDIUM MONTANUM                   .19      .01        .67 (      1.15,  3)   20000 ( 34641,  3)      .97      3.33 (  5.77,  3)    1.00     30.00        33           1
POA PRATENSIS                      2.10      .07       7.33 (     12.70,  3)     ID  (      0,  3)     3.88     13.33 ( 23.09,  3)     ID        ID         33           6

     ALL SPECIES                            3.49     349.00                  2349333
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NOTES: 1) ID= INSUFFICIENT DATA, DENSITY DATA NOT COLLECTED FOR ALL SPECIES AND ALL TRANSECTS.
       2) SOCIABILITY IS DEPENDENT UPON DENSITY DATA.
       3) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.
       4) IMPORTANCE VALUE EQUALS RELATIVE COVER PLUS RELATIVE FREQUENCY
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Rabbitbrush, Table 2.3-16

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HERBACEOUS STRATUM-- RABBITBRUSH
SUMMARY--   2 HERB TRANSECTS WITHIN TYPE-- RABBITBRUSH
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                              RELATIVE  PERCENT   ****** COVER *******   **** DENSITY ****     RELATIVE  PER CENT FREQUENCY     NUMBER                                IMPORTANCE
        SPECIES                COVER     COVER    M2/HA ( STD DEV,  N )   NO/HA (STD DEV,N ) FREQUENCY   MEAN (ST.DEV, N )    /QUAD. SOCIABILITY CONSTANCY   VALUE
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------
ELYMUS CINEREUS                74.34     3.39   339.00 (    121.62,  2)    ID  (       0,  2)    32.26   100.00 (   .00,  2)      ID        ID        100        107
BROMUS TECTORUM                 7.35      .33    33.50 (     47.38,  2)    ID  (       0,  2)     8.06    25.00 ( 35.36,  2)      ID        ID         50         15
DESCURAINIA RICHARDSONII        2.30      .10    10.50 (     12.02,  2) 420000 (401637,  2)    20.97    65.00 ( 21.21,  2)    21.00     32.31       100         23
CHORISPORA TENELLA               .22      .01     1.00 (      1.41,  2)   6000 (  8485,  2)     1.61     5.00 (  7.07,  2)      .30      6.00        50          2
LAPPULA REDOWSKII                .00      .00      .00 (    ID    ,   )   2000 (  2828,  2)     1.61     5.00 (  7.07,  2)      .10      2.00        50          2
ARTEMISIA LUDOVICIANA            .22      .01     1.00 (      1.41,  2)   4000 (  5657,  2)     3.23    10.00 ( 14.14,  2)      .20      2.00        50          3
CHENOPODIUM ALBUM                .00      .00      .00 (    ID    ,   )   1000 (  1414,  2)     1.61     5.00 (  7.07,  2)      .05      1.00        50          2
SITANION LONGIFOLIUM            3.84      .17    17.50 (     24.75,  2)    ID  (       0,  2)     3.23    10.00 ( 14.14,  2)      ID        ID         50          7
AGROPYRON SMITHII               1.10      .05     5.00 (      7.07,  2)    ID  (       0,  2)     8.06    25.00 ( 35.36,  2)      ID        ID         50          9
TARAXACUM OFFICINALE             .55      .02     2.50 (      3.54,  2)   3000 (  4243,  2)     1.61     5.00 (  7.07,  2)      .15      3.00        50          2
POA PRATENSIS                   9.21      .42    42.00 (     59.40,  2)    ID  (       0,  2)    11.29    35.00 ( 49.50,  2)      ID        ID         50         21
JUNCUS ARCTICUS SSP, ATER        .77      .03     3.50 (      4.95,  2)    ID  (       0,  2)     3.23    10.00 ( 14.14,  2)      ID        ID         50          4
SOLIDAGO SP.                     .11      .00      .50 (       .71,  2)   2000 (  2828,  2)     3.23    10.00 ( 14.14,  2)      .10      1.00        50          3

    ALL SPECIES                           4.56   456.00                 438000
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NOTES: 1) ID= INSUFFICIENT DATA, DENSITY DATA NOT COLLECTED FOR ALL SPECIES AND ALL TRANSECTS.
       2) SOCIABILITY IS DEPENDENT UPON DENSITY DATA.
       3) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.
       4) IMPORTANCE VALUE EQUALS RELATIVE COVER PLUS RELATIVE FREQUENCY
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Bald, Table 2.3-17

SHRUB-SEEDLING STRATUM-- UPLAND MEADOW
SUMMARY-- 3 NON-PERM. TRANSECT(S)/TYPE 1975

SPECIES	*** RELATIVE *** COVER	DENSITY	FREQ	IMPORTANCE VALUE*	PER CENT COVER	* FREQUENCY ** MEAN (SD, N)	******* COVER ******** M2/HA (STD DEV, N)	***** DENSITY **** NO/HA (ST DEV, N)	MEAN INTERCEPT (CM) MEAN (STD ERR, N)	CONSTANCY
ARTEMISIA TRIDENTATA	26	4	16	45	2.48	40 (35, 3)	248.33 (430.13, 3)	200 (161, 3)	124.17 (124.17, 3)	100
CHRYSOTHAMNUS VISCIDIFLORUS	27	50	38	115	2.62	93 (12, 3)	261.67 (262.79, 3)	2761 (1627, 3)	22.17 (14.60, 3)	100
TETRADYMIA CANESCENS	47	45	32	124	4.53	80 (35, 3)	453.00 (751.95, 3)	2506 (2589, 3)	16.74 (13.12, 3)	100
SYMPHORICARPOS OREOPHILUS	1	1	8	10	.05	20 (35, 3)	5.00 (8.66, 3)	72 (125, 3)	5.00 (5.00, 3)	33
AMELANCHIER ALNIFOLIA	0	0	5	6	.00	13 (23, 3)	.00 (.00, 3)	11 (19, 3)	.00 (.00, 3)	33
ALL SPECIES					9.68		968.00	5550		

NOTES: 1) IMPORTANCE VALUE = RELATIVE COVER + RELATIVE DENSITY + RELATIVE FREQUENCY.
2) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.

Bald, Table 2.3-18

HERBACEOUS STRATUM-- UPLAND MEADOW
SUMMARY-- 2 HERB TRANSECTS WITHIN TYPE-- UPLAND MEADOW

SPECIES	RELATIVE COVER	PERCENT COVER	****** COVER ******* M2/HA (STD DEV, N)	**** DENSITY **** NO/HA (STD DEV,N)	RELATIVE FREQUENCY	PER CENT FREQUENCY MEAN (ST.DEV, N)	NUMBER /QUAD.	SOCIABILITY	CONSTANCY	IMPORTANCE VALUE
HAPLOPAPPUS ACAULIS	17.55	.44	44.50 (62.93, 2)	32000 (45255, 2)	4.39	45.00 (63.64, 2)	1.60	3.56	50	22
HAPLOPAPPUS NUTALLII	4.73	.12	12.00 (11.31, 2)	61000 (41012, 2)	6.83	70.00 (14.14, 2)	3.05	4.36	100	12
ASTRAGALUS SPATULATUS	11.24	.28	28.50 (27.58, 2)	73000 (43841, 2)	7.32	75.00 (7.07, 2)	3.65	4.87	100	19
PHLOX HOODII	3.16	.08	8.00 (11.31, 2)	11000 (15556, 2)	1.95	20.00 (28.28, 2)	.55	2.75	50	5
HYMENOXYS ACAULIS	4.54	.11	11.50 (12.02, 2)	51000 (21213, 2)	5.85	60.00 (.00, 2)	2.55	4.25	100	10
CASTILLEJA CHROMOSA	.59	.01	1.50 (2.12, 2)	6000 (8485, 2)	1.46	15.00 (21.21, 2)	.30	2.00	50	2
ZYGADENUS PANICULATUS	.20	.00	.50 (.71, 2)	1000 (1414, 2)	.49	5.00 (7.07, 2)	.05	1.00	50	1
LOMATIUM ORIENTALE	1.97	.05	5.00 (4.24, 2)	36000 (11314, 2)	8.78	90.00 (14.14, 2)	1.80	2.00	100	11
POA SANDBERG	16.17	.41	41.00 (26.87, 2)	ID (0, 2)	8.29	85.00 (21.21, 2)	ID	ID	100	24
AGROPYRON TRACHYCAULUM	11.44	.29	29.00 (16.97, 2)	ID (0, 2)	6.83	70.00 (14.14, 2)	ID	ID	100	18
ARENARIA FENDLERI	.20	.00	.50 (.71, 2)	18000 (25456, 2)	2.93	30.00 (42.43, 2)	.90	3.00	50	3
PHLOX LONGIFOLIA	.20	.00	.50 (.71, 2)	28000 (14142, 2)	4.39	45.00 (7.07, 2)	1.40	3.11	100	5
CALOCHORTUS SP.	.00	.00	.00 (ID ,)	2000 (2828, 2)	.98	10.00 (14.14, 2)	.10	1.00	50	1
PHYSARIA FLORIBUNDA	.20	.00	.50 (.71, 2)	6000 (8485, 2)	1.46	15.00 (21.21, 2)	.30	2.00	50	2
ASTRAGALUS CHAMAELEUCE	.99	.02	2.50 (3.54, 2)	9000 (1414, 2)	3.41	35.00 (7.07, 2)	.45	1.29	100	4
LYGODESMIA JUNCEA	.39	.01	1.00 (1.41, 2)	11000 (15556, 2)	.98	10.00 (14.14, 2)	.55	5.50	50	1
TRIFOLIUM GYMNOCARPON	2.17	.05	5.50 (4.95, 2)	17000 (9899, 2)	4.88	50.00 (14.14, 2)	.85	1.70	100	7
KOELERIA GRACILIS	10.45	.26	26.50 (10.61, 2)	ID (0, 2)	6.83	70.00 (.00, 2)	ID	ID	100	17
ERIOGONUM LONCHOPHYLLUM	1.58	.04	4.00 (2.83, 2)	16000 (14142, 2)	4.88	50.00 (28.28, 2)	.80	1.60	100	6
HEDYSARUM BOREALE	.59	.01	1.50 (2.12, 2)	1000 (1414, 2)	.49	5.00 (7.07, 2)	.05	1.00	50	1
SPHAERALCEA COCCINEA	.00	.00	.00 (ID ,)	2000 (2828, 2)	.49	5.00 (7.07, 2)	.10	2.00	50	0
COMANDRA UMBELLATA	.99	.02	2.50 (3.54, 2)	6000 (8485, 2)	.49	5.00 (7.07, 2)	.30	6.00	50	1
ORYZOPSIS HYMENOIDES	1.38	.03	3.50 (4.95, 2)	ID (0, 2)	1.95	20.00 (28.28, 2)	ID	ID	50	3
CRYPTANTHA SERICEA	.00	.00	.00 (ID ,)	1000 (1414, 2)	.49	5.00 (7.07, 2)	.05	1.00	50	0
IPOMOPSIS AGGREGATA	1.38	.03	3.50 (3.54, 2)	11000 (9899, 2)	1.95	20.00 (14.14, 2)	.55	2.75	100	3
ERIGERON PUMILIS	.59	.01	1.50 (.71, 2)	3000 (1414, 2)	.98	10.00 (.00, 2)	.15	1.50	100	2
PENSTEMON CAESPITOSUS	4.73	.12	12.00 (16.97, 2)	33000 (35355, 2)	4.88	50.00 (42.43, 2)	1.65	3.30	100	10
MENTZELIA MULTIFLORA	.79	.02	2.00 (2.83, 2)	11000 (15556, 2)	1.95	20.00 (28.28, 2)	.55	2.75	50	3
OXYTROPIS LAMBERTII	.20	.00	.50 (.71, 2)	2000 (2828, 2)	.98	10.00 (14.14, 2)	.10	1.00	50	1
ARTEMISIA DRACUNCULUS	.99	.02	2.50 (3.54, 2)	6000 (8485, 2)	1.95	20.00 (28.28, 2)	.30	1.50	50	3
LINUM LEWISII	.59	.01	1.50 (2.12, 2)	2000 (2828, 2)	.49	5.00 (7.07, 2)	.10	2.00	50	1
ALL SPECIES		2.53	253.50	456000						

NOTES: 1) ID= INSUFFICIENT DATA. DENSITY DATA NOT COLLECTED FOR ALL SPECIES AND ALL TRANSECTS.
2) SOCIABILITY IS DEPENDENT UPON DENSITY DATA.
3) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.
4) IMPORTANCE VALUE EQUALS RELATIVE COVER PLUS RELATIVE FREQUENCY

Shadscale, Table 2.3-19

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HERBACEOUS STRATUM-- SHADSCALE
SUMMARY--   2 HERB TRANSECTS WITHIN TYPE-- SHADSCALE
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                              RELATIVE  PERCENT   ****** COVER *******    **** DENSITY ****    RELATIVE  PER CENT FREQUENCY    NUMBER                          IMPORTANCE
        SPECIES                 COVER    COVER    M2/HA ( STD DEV,  N )  NO/HA (STD DEV,N ) FREQUENCY  MEAN (ST.DEV, N )    /QUAD. SOCIABILITY CONSTANCY   VALUE
------------------------------------------------------------------------------------------------------------------------------------------------------------------------
HAPLOPAPPUS NUTALLII             4.71      .02     2.00 (     2.83,  2)   6000 (  8485,  2)   11.43    20.00 ( 28.28,  2)      .30      1.50        50          16
ERIOGONUM LONCHOPHYLLUM         21.18      .09     9.00 (    12.73,  2)  29000 ( 41012,  2)   20.00    35.00 ( 49.50,  2)     1.45      4.14        50          41
OENOTHERA SP.                    4.71      .02     2.00 (     2.83,  2)   7000 (  9899,  2)   11.43    20.00 ( 28.28,  2)      .35      1.75        50          16
SPHAERALCEA COCCINEA             2.35      .01     1.00 (     1.41,  2)   9000 ( 12728,  2)    5.71    10.00 ( 14.14,  2)      .45      4.50        50           8
ORYZOPSIS HYMENOIDES             4.71      .02     2.00 (      .00,  2)    ID  (     0,  2)    8.57    15.00 (  7.07,  2)      ID        ID        100          13
SITANION LONGIFOLIUM             5.88      .02     2.50 (     3.54,  2)    ID  (     0,  2)    2.86     5.00 (  7.07,  2)      ID        ID         50           9
MENTZELIA MULTIFLORA            52.94      .22    22.50 (    27.58,  2)  15000 ( 15556,  2)   20.00    35.00 ( 21.21,  2)      .75      2.14       100          73
CHENOPODIUM ALBUM                2.35      .01     1.00 (     1.41,  2)  25000 ( 35355,  2)    8.57    15.00 ( 21.21,  2)     1.25      8.33        50          11
DESCURAINIA RICHARDSONII          .00      .00      .00 (    ID   ,   )   3000 (  4243,  2)    2.86     5.00 (  7.07,  2)      .15      3.00        50           3
PENSTEMON CAESPITOSUS            1.18      .00      .50 (      .71,  2)   4000 (  5657,  2)    8.57    15.00 ( 21.21,  2)      .20      1.33        50          10

    ALL SPECIES                            .42    42.50                  98000
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NOTES: 1) ID= INSUFFICIENT DATA, DENSITY DATA NOT COLLECTED FOR ALL SPECIES AND ALL TRANSECTS.
       2) SOCIABILITY IS DEPENDENT UPON DENSITY DATA.
       3) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.
       4) IMPORTANCE VALUE EQUALS RELATIVE COVER PLUS RELATIVE FREQUENCY
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Riparian, Table 2.3-20

SHRUB-SEEDLING STRATUM-- RIPARIAN
SUMMARY-- 2 NON-PERM. TRANSECT(S)/TYPE 1975

SPECIES	*** RELATIVE *** COVER	DENSITY	FREQ	IMPORTANCE VALUE*	PER CENT COVER	* FREQUENCY ** MEAN (SD, N)	******* COVER ******** M2/HA (STD DEV, N)	***** DENSITY **** NO/HA (ST DEV, N)	MEAN INTERCEPT (CM) MEAN (STD ERR, N)	CONSTANCY
PINUS EDULIS	0	1	2	3	.00	10 (14, 2)	.00 (.00, 2)	25 (35, 2)	.00 (.00, 2)	50
TAMARIX PENTANDRA	3	1	5	8	.95	20 (28, 2)	95.00 (134.35, 2)	25 (35, 2)	95.00 (95.00, 2)	50
ARTEMISIA TRIDENTATA	56	47	23	126	19.16	100 (0, 2)	1916.50 (1202.79, 2)	1683 (330, 2)	74.17 (18.06, 2)	100
CHRYSOTHAMNUS NAUSEOSUS	18	24	23	65	6.33	100 (0, 2)	633.50 (772.87, 2)	850 (47, 2)	46.58 (32.08, 2)	100
PRUNUS VIRGINIANA	2	0	2	5	.70	10 (14, 2)	70.50 (99.70, 2)	8 (12, 2)	35.25 (35.25, 2)	50
RIBES SP.	0	1	5	6	.00	20 (28, 2)	.00 (.00, 2)	42 (59, 2)	.00 (.00, 2)	50
SALIX EXIGUA	9	3	5	17	3.10	20 (28, 2)	310.00 (438.41, 2)	125 (177, 2)	18.24 (18.24, 2)	50
SYMPHORICARPOS OREOPHILUS	7	17	14	38	2.55	60 (57, 2)	255.00 (360.62, 2)	608 (813, 2)	28.33 (28.33, 2)	100
AMELANCHIER ALNIFOLIA	1	1	5	6	.19	20 (28, 2)	18.50 (26.16, 2)	42 (59, 2)	18.50 (18.50, 2)	50
RIBES AUREUM	0	1	7	8	.00	30 (42, 2)	.00 (.00, 2)	42 (59, 2)	.00 (.00, 2)	50
ROSA WOODSII	1	3	5	8	.18	20 (28, 2)	17.50 (24.75, 2)	92 (130, 2)	17.50 (17.50, 2)	50
RIBES INERME	4	1	5	9	1.34	20 (28, 2)	134.00 (189.50, 2)	33 (47, 2)	134.00 (134.00, 2)	50
ALL SPECIES					34.50		3450.50	3575		

NOTES: 1) IMPORTANCE VALUE = RELATIVE COVER + RELATIVE DENSITY + RELATIVE FREQUENCY.
2) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.

Riparian, Table 2.3-21

HERBACEOUS STRATUM-- RIPARIAN
SUMMARY-- 3 HERB TRANSECTS WITHIN TYPE-- RIPARIAN

SPECIES	RELATIVE COVER	PERCENT COVER	****** COVER ******* M2/HA (STD DEV, N)	**** DENSITY **** NO/HA (STD DEV,N)	RELATIVE FREQUENCY	PER CENT FREQUENCY MEAN (ST.DEV, N)	NUMBER /QUAD.	SOCIABILITY	CONSTANCY	IMPORTANCE VALUE
AGROPYRON REPENS	74.47	5.07	506.67 (91.70, 3)	ID (0, 3)	34.52	96.67 (5.77, 3)	ID	ID	100	109
SOLIDAGO SP.	2.94	.20	20.00 (26.46, 3)	63333 (101160, 3)	7.14	20.00 (26.46, 3)	3.17	15.83	67	10
PLANTAGO MAJOR	.73	.05	5.00 (8.66, 3)	20000 (34641, 3)	2.38	6.67 (11.55, 3)	1.00	15.00	33	3
TARAXACUM OFFICINALE	.54	.04	3.67 (1.53, 3)	8000 (5292, 3)	7.14	20.00 (10.00, 3)	.40	2.00	100	8
JUNCUS ARCTICUS SSP. ATER	3.43	.23	23.33 (36.17, 3)	ID (0, 3)	3.57	10.00 (ID ,)	ID	ID	67	7
RANUNCULUS CYMBALARIA	2.60	.18	17.67 (30.60, 3)	80000 (130000, 3)	3.57	10.00 (ID ,)	4.00	40.00	67	6
CARYY NEBRASKENSIS	2.20	.15	15.00 (25.98, 3)	ID (0, 3)	1.19	3.33 (5.77, 3)	ID	ID	33	3
CAREX SP.	4.56	.31	31.00 (45.03, 3)	ID (0, 3)	4.76	13.33 (5.77, 3)	ID	ID	100	9
KOCHIA IRANICA	.15	.01	1.00 (1.73, 3)	40000 (69282, 3)	1.19	3.33 (5.77, 3)	2.00	60.00	33	1
CHENOPODIUM ALBUM	6.57	.45	44.67 (77.36, 3)	668000 (*5182., 3)	10.71	30.00 (36.06, 3)	33.40	111.33	67	17
DESCURAINIA RICHARDSONII	.88	.06	6.00 (7.94, 3)	138000 (127012, 3)	15.48	43.33 (37.86, 3)	6.90	15.92	67	16
POA PRATENSIS	.44	.03	3.00 (4.36, 3)	ID (0, 3)	4.76	13.33 (15.28, 3)	ID	ID	67	5
CHENOPODIUM LEPTOPHYLLUM	.24	.02	1.67 (2.89, 3)	7333 (12702, 3)	1.19	3.33 (5.77, 3)	.37	11.00	33	1
CHORISPORA TENELLA	.24	.02	1.67 (2.89, 3)	8667 (15011, 3)	2.38	6.67 (11.55, 3)	.43	6.50	33	3
ALL SPECIES		6.80	680.33	1033333						

NOTES: 1) ID= INSUFFICIENT DATA, DENSITY DATA NOT COLLECTED FOR ALL SPECIES AND ALL TRANSECTS.
2) SOCIABILITY IS DEPENDENT UPON DENSITY DATA.
3) STANDARD DEVIATION FOR PER CENT COVER CAN BE CALCULATED FROM COVER DATA.
4) IMPORTANCE VALUE EQUALS RELATIVE COVER PLUS RELATIVE FREQUENCY

2.3.1.5

Vegetation Raw Data

VEGETATION

LINE-STRIP DATA SHEET
MATURE TREE STRATUM

Project 83

Sheet 1 of 1

Vegetation Type Aspen   Transect # [illegible]   Type [illegible]

T 9S   R 100 W   S 35   1/4 1/4 S [illegible]/NE   Transect Length 100 m

Aspect (degrees) ____   Slope (degrees) ____   Elevation (feet) [illegible]

Field Analyst(s) [illegible]   Date 5/26/76

Site Description ____   QA Check [illegible] 6-1-76

			# in each 6 x 20 m quadrat					
Species	Code #	Phenology Code	1	2	3	4	5	Condition
1 Potr	003	1	6	6	[illegible]	[illegible]	–	
2 Pome	004	—						
3								
4								
5								

	Intercepts (m)								
Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	Trunk Diameter (cm) of Each Tree
Potr	14.00	16.03	0.00	1.72	4.01	6.00	6.22	7.37	6,-7,10, 13, 10, 11
	6.59	8.28	14.20	16.22	1.45	3.52	4.40	5.11	21,
	1.54	3.46	10.02	12.11	13.20	15.32	13.02	15.27	6,-15,10,11,15,10
	15.10	16.60	17.40	20.00					7.5,
									6,-8,10,
									5,-11,12,8,15,
									9-- [illegible] 9,1
Pome									
									6,-21

RBOSP PROGRESS REPORT

LINE-STRIP DATA SHEET

Project 83

SHRUB STRATUM

Sheet 1 of 2

egetation Type Aspen.

Transect # B-6

[illegible] R [illegible] S [illegible] ¼ ¼ S [illegible]

Transect Length [illegible]

ield Analyst(s) [illegible]

Date [illegible]

QA Check [illegible] 6-1-76

pecies	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
Artr	014	2	90	19	19	12	16	0
A vt	032	2	45	1	2	0	24	21
[illegible] por (clones)	[illegible]	2	70	[illegible]3	37	61	46	11
[illegible]	041	1&2	80	39	44	10	13	11
Prvi (clones)	[illegible]	1-4	[illegible]	17	[illegible]	0	0	20
Sa[illegible] sp. *		1&2	65	1	0	3	0	3
Potr	[illegible]	2	90	2	5	21	4	18
R[illegible] inerme	[illegible]	2	60	1	0	6	6	13

* needs a new num

Intercepts (m)

pecies	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	
por	0.00	0.30	2.50	2.52	4.[illegible]	4.33	4.61	5.02	4.96	5.17	
	5.3[illegible]	[illegible].40	5.70	5.94	6.50	7.01	7.27	8.06	9.73	9.76	
	11.[illegible]7	11.40	11.92	[illegible]	12.19	12.24	12.33	12.39	13.65	13.[illegible]	
	13.89	14.64	14.63	14.82	[illegible].31	16.62	16.73	16.82	16.90	17.92	
	18.05	18.32	[illegible]	19.04	19.22	19.44	19.63	19.65	19.98	20.[illegible]	
	[illegible]	0.15	0.42	0.53	0.71	0.73	[illegible].93	1.12	1.47	1.73	
	1.99	2.78	3.31	4.27	4.74	4.83	5.59	6.32	6.73	6.[illegible]7	
	7.63	8.03	9.60	9.6[illegible]	[illegible].13	10.21	13.69	14.39	15.82	16.09	
	16.64	[illegible].73	[illegible].05	17.56	18.66	19.76	0.90	1.62	2.63	2.74	
tr.	1.30	1.62	[illegible]	9.23	11.52	11.60	13.90	14.14	4.81	4.94	
	9.06	9.19									
wo	3.90	3.91	5.40	5.67	6.05	6.27	13.00	[illegible]	[illegible]	13.3[illegible]	
	11.48	11.72	0.19	0.22	1.91	1.92	[illegible]	[illegible]	14.19	14.39	
	14.70	14.78	14.92	15.02	10.01	10.11	12.54	13.20			
in	17.70	17.80	18.35	18.55	14.18	14.37	15.05	15.15			
vt	16.87	16.90	3.70	3.81	3.90	4.04	6.62	9.72			
Ri[illegible]	3.6[illegible]	3.71	[illegible]	12.5[illegible]	18.30	19.06	3.05	3.14	6.71	7.12	

RBOSP PROGRESS REPORT

LINE STRIP DATA SHEET
SHRUB, TREE SEEDLING STRATUM

Project 83
Sheet 2 of 2

Vegetation Type Aspen
Non-Permanent Transect # A-6
Date 5/23/76

Intercepts (cm)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
Syor	3.22	3.40	4.31	7.78	[illegible]	6.64	7.37	7.89	8.04	[illegible]
	8.75	9.79	10.30	10.79	11.96	12.05	12.12	12.84	13.12	[illegible]
	16.10	17.74	19.75	20.00	[illegible]	1.01	[illegible]	2.73	[illegible]	[illegible]
	3.48	4.14	5.60	[illegible]	7.05	7.94	10.04	10.80	11.24	[illegible]
	13.42	13.60	13.96	11.13	[illegible]	14.92	15.50	16.02	16.81	[illegible]
	19.02	19.49	19.57	[illegible]	[illegible]	0.92	1.62	2.03	3.40	3.62
	5.18	5.34	11.10	12.20						
Prvi	7.62	9.89	10.62	10.73	11.62	13.30	17.20	17.42	18.03	[illegible]

[illegible] PROGRESS REPORT ECI

ecology consultants, in

[illegible] E400'

(12)

LINE-STRIP DATA SHEET
MATURE TREE STRATUM

Project 8[illegible]

Sheet 1 of 1

getation Type [illegible] Transect # 6 Type [illegible]

T [illegible] R [illegible] S ____ 1/4 1/4 S [illegible] Transect Length [illegible]

Aspect (degrees) 330 Slope (degrees) 6° Elevation (feet) 5400

Field Analyst(s) [illegible] Date [illegible]76

Site Description [illegible] QA Check [illegible] 6-1-76

Species	Code #	Phenology Code	# in each 6 x 20 m quadrat 1	2	3	4	5	Condition
1 PSME	C04	—	10	2	4	2	2	
2								
3								
4								
5								

Species	Intercepts (m) I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	Trunk Diameter (cm) of Each Tree
									Q.1
PSME	0	.6	2.	2.2	3.20	20.00	0	12.20	13, 16, 20, 18, 13, 14
PSME	16.50	20.00	2.60	5.33	6.50	3.35	18.16	00	11, 10, 17, 9
PSME	0	9.80	13.40	20.00					
									Q2. 52, 61,
									Q3 16, 97, 108
									Q4 14, 9
									Q5 10, 11

[illegible]SP PROGRESS REPORT

LINE-STRIP DATA SHEET

Project 83

SHRUB STRATUM

Sheet 1 of 1

Vegetation Type [illegible]

Transect # 6

T 1S R 10W S 29 ¼ ¼ S NWNE

Transect Length 100 m

Fi d Analyst(s) [illegible]

Date 5/26/76

QA Check [illegible] 6-1-76

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 SIOR	[illegible]	2	45	54	55	43	23	10
2 PSME	004	–	100 cm	6	7	6	3	4
3 AMAL	024	2 ?	150		8	10	2	10
4 APTR	[illegible]	2	10			2		
5 QEGA	[illegible]	42	100				3	2
6 CEMO	[illegible]	2	30					1
7								
8								
9								
10								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
SIOR	1.70	1.98	3.00	3.52	4.12	4.57	6.7	7.19	7.49	8.50
SI	9.75	10.40	11.35	11.79	12.40	12.56	12.75	14.13	19.70	20.00
SIOR	0.85	2.19	4.70	7.20	7.85	11.60	12.30	13.50	18.71	18.91
SIOR	0	2.40	4.38	4.69	5.10	6.23	9.0	9.15	9.5	9.65
SIOR	11.0	11.30	11.5	12.10	12.55	12.65	13.10	13.25	13.3	14.10
AMAL	9.85	10.10	11.75	12.75	14.00	14.10	14.65	15.25	15.25	15.50
AMAL	0	2.11	2.71	3.02	[illegible]	7.00	9	[illegible]	[illegible]	[illegible]
AMAL	18.4	18.50	1.30	4.53	11.15	12.70	16.50	[illegible]	17.50	[illegible]
PSME	11.10	11.4	12.70	11.5	18.85	19.30				
QEGA	10.3	11.20	11.70	12.6						
SIOR	18.10	18.6	18.8	19.05	19.20	[illegible]	3.00	4.35	7.90	8.29
	1.70	2.19	7.81	10.95	19.70	20.60				
CEMO	[illegible]	16.25								

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[illegible] PROGRESS REPORT

LINE-STRIP DATA SHEET

Project 83

SHRUB STRATUM

Sheet 3 of 5

etation Type MB-2 (76) Transect # MB-19

R S ¼ ¼ S Transect Length

Field Analyst(s) Ellis, Moresor Date 5-22-76 QA Check [illegible] 6-1-76

pecies	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
6								
7								
8								
9								
0								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
ARTR	17.65	18.00	[illegible]	[illegible]						

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RBOSP PROGRESS REPORT

LINE-STRIP DATA SHEET

Project [illegible]

SHRUB STRATUM

Sheet 2 of 3

ion Type MB-2 (76). Transect # MB-19

R S ¼ ¼ S Transect Length

Analyst(s) Ellis, McGregor Date [illegible] QA Check [illegible] 6-1-76

ecies	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5

Intercepts (m)

ecies	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
[illegible]	[illegible]	1.25	[illegible]	[illegible]	[illegible]	2.27	2.25	2.45	[illegible]	[illegible]
	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	20.02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	2.61	[illegible]	[illegible]	[illegible]	12.97	[illegible]	[illegible]	[illegible]	[illegible]
	17.20	17.55								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11.80	[illegible]	[illegible]	[illegible]	[illegible]
|	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		

[illegible] elevation: 75[illegible]

LINE-STRIP DATA SHEET

Project 0[illegible]

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SHRUB STRATUM

Sheet 1 of 3

Vegetation Type Mixed brush

Transect # MB-19

T 3[illegible] R 99W S 19 ¼ ¼ S SW SW

Transect Length 100 m

Field Analyst(s) Ellis, McGregor

Date 5/23/76

QA Check [illegible] 6-1-76

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
[illegible]	014	2	[illegible]	[illegible]	45	43	63	5[illegible]
[illegible]	[illegible]	2	25	33	24	27	[illegible]	34
[illegible]	024	3	40	7	5	0	0	0
[illegible]	0[illegible]0	2	25	1	0	3	7	5
[illegible]	[illegible]	3,4	130	14	19	17	22	34
[illegible]	035	[illegible]	200	0	2	1	4	
[illegible]	001	—	60	0	0	0	1	1

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
Artr	0	0.39	[illegible]	[illegible]	[illegible]	9.10	[illegible]	7.36	12.95	13.[illegible]
	[illegible]	10.9[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.35	17.92	[illegible]
	[illegible]	[illegible]	[illegible]	2.1[illegible]	[illegible]	[illegible]	7.[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	3.75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12.38	[illegible]40	[illegible]	[illegible]	[illegible]
	[illegible]	14.92	15.0[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]
	[illegible]	0.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.55	7.[illegible]0	7[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	14.[illegible]	15.60	15.9[illegible]
	16.7[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.99	6.60	[illegible]
	[illegible]	[illegible]	12.9[illegible]	[illegible]	[illegible]	[illegible]	15.25	[illegible]	16.90	[illegible]
Syor	0.[illegible]	0.75	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	14.95	15.10	15.1[illegible]	[illegible]	1[illegible]	[illegible]	4.72	[illegible]	[illegible]	7.[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.3[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	5.[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	1[illegible]	11.10	[illegible]	15.[illegible]	[illegible]	0	[illegible]	[illegible]	7.50
	[illegible]	1[illegible]								

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RBOSP PROGRESS REPORT

Sect 65
Slope 21°
Dir. orient. 300°
elevation: 7100'

LINE-STRIP DATA SHEET

SHRUB STRATUM

Project ______

Sheet 1 of 2

getation Type Mixed Brush Transect # [illegible]

[illegible] R 99W S 13 ¼ ¼ S NW Transect Length ______

eld Analyst(s) Ellis McGregor Date 5/23/76 QA Check [illegible] 6-1-76

pecies	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
Artv	514	2	60	43	42	12	3	21
[illegible]	022	34	40	14	14	24	7	37
[illegible]	032	2	30	3	7	14	12	[illegible]
Chvi	020	2	30	1	5	6	7	[illegible]
Teca	031	2	15	0	1	0	0	0
Pu[illegible]	024	3	20	0	1			
Oppo	027	2	15	[illegible]	1	1	.	1
P[illegible]	002	—	100		-			

Intercepts (m)

pecies	I₁	I₂	I₁	I₂	I₁	I₂	I₁	I₂	I₁	I₂	
ArTv	0	0.61	3.31	3.58	4.12	4.67	5.42	6.59	[illegible]	11.2[illegible]	
	11.40	11.54	12.28	12.5[illegible]	12.5[illegible]	[illegible].65	12.[illegible]	[illegible].01	[illegible].25	[illegible]	
	14.85	14.95	15.[illegible]	15.[illegible]	15.50	[illegible]	1[illegible]	15.[illegible]	1[illegible]	14.[illegible]	
	0.6	0.86	1.95	2.60	3.69	[illegible]	7.10	7.42	[illegible]	[illegible]	
	1[illegible]	13.[illegible]	9.20	10.30	4.20	[illegible]	[illegible]	[illegible]	[illegible]		
	[illegible]	5.02	[illegible]	[illegible]	7.18	7.40	[illegible].05	[illegible]	[illegible]	[illegible]	
	10.95	11.2[illegible]	12.0	[illegible]	17.72	17.93	[illegible]	[illegible]	[illegible]	14.[illegible]	
	14.30	14.[illegible]	17.3[illegible]	[illegible]	17.5[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible].05	11.02	[illegible]	[illegible]	14.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	3.[illegible]	3.57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	10.34	10.40	[illegible]	[illegible]	[illegible]	[illegible]	4.40	[illegible]	[illegible]	[illegible]	
[illegible]ov	[illegible]	2.02	[illegible]	[illegible]	2.20	2.50	3.[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]			3.[illegible]	9.95	[illegible]	19.6	
Chvi	[illegible]	[illegible]									

[illegible] REPORT

LINE-STRIP DATA SHEET

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SHRUB STRATUM

Sheet 2 of 2

Vegetation Type MB-[illegible]

Transect # MB-20

T ________ R ________ S ________ ¼ ¼ S ________ Transect Length ________

Field Analyst(s) Ellis McGregor Date 5/23/76 QA Check [illegible] 6-1-76

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1								
2								
3								
4								
5								
6								
7								
8								
9								
0								

Intercepts (m)

Species	I1	I2	I1	I2	I1	I2	I1	I2	I1	I2
[illegible]	0	1.0	1.39	1.96	2.25	[illegible]	2.99	3.20	6.3	8.45
	9.45	9.52	10.10	10.15	10.80	[illegible]	13.25	13.6	14.12	14.25
	15.67	15.8	[illegible]	[illegible]	18.05	18.10	19.45	19.75	19.90	20.0
	0	1.11	2.80	[illegible]	7.35	7.43	12.90	13.15	15.50	15.55
	16.10	[illegible]								
Sym.	[illegible]	2.74	[illegible]	[illegible]	[illegible]	[illegible]	13.40	13.5	[illegible]	[illegible]
	4.83	[illegible]	5.07	5.12	8.71	8.92	9.05	9.12	13.45	[illegible]
	14.5	[illegible]								
[illegible]	[illegible]	[illegible]	5.70	6.05	[illegible]	7.03	7.16	[illegible]	8.0	[illegible]
	1.55	3.10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	15.0	[illegible]	[illegible]	[illegible]	[illegible]	17.55	[illegible]	[illegible]	

RBOSP PROGRES

LINE-STRIP DATA SHEET

SHRUB STRATUM

Project [illegible]

Sheet 1 of 2

Vegetation Type Mixed Brush

Transect # MP 21

T 25 R 100W S 27 ¼ ¼ S SE/SE

Transect Length 100 m

Field Analyst(s) DPM DCK PTD

Date 5/26/76

QA Check [illegible] 6-1-76

[illegible] 210

Slope 25°

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 Quga [illegible]	025	[illegible]	200	2	0	1	0	0
2 Adfa	014	2	50	72	70	69	67	65
3 [illegible]	024	2	40	31	34	17	27	18
4 [illegible]	023	2	40	18	7	10	8	17
5 [illegible]	020	2	120	12	22	13	26	7
6 Chvi	030	2	20	9	14	26	9	25
7 Trca	031	2	[illegible]	0	4	0	0	2
8								
9								
0								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
Qu[illegible]	[illegible]	0.84	1.50	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	0.64	1.40	[illegible]	1.94	2.36	2.94	3.44	7.72	[illegible]
	[illegible]	[illegible]	14.0[illegible]	14.55	14.76	14.96	15.20	15.51	15.62	15.70
	[illegible]	[illegible]	[illegible]	[illegible]	3.37	4.54	5.52	5.65	7.92	7.99
	14.70	[illegible]	15.[illegible]	15.92	16.22	16.31	3.78	3.17	4.5[illegible]	[illegible]
	[illegible]	6.[illegible]5	7.70	7.75	8.26	8.30	9.24	9.55	10.[illegible]	13.00
	13.37	[illegible]	0.00	0.5[illegible]	0.62	0.73	1.00	1.14	2.32	2.37
S[illegible]	1.3	[illegible]	6.00	7.27	8.10	[illegible]	0.16	0.52	5.33	5.92
	[illegible]	[illegible]	9.93	10.0[illegible]	10.[illegible]3	10.34	6.90	7.15	17.9[illegible]	17.90
	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12.0[illegible]	[illegible]	16.20	17.04	16.80	17.57
	[illegible]	[illegible]	2.1[illegible]	[illegible]	[illegible]	3.84	15.03	[illegible]	1.3[illegible]	3.36
Chvi	[illegible]	[illegible]	[illegible]	[illegible]	11.01	11.04	[illegible]	[illegible]	4.98	[illegible]

RBOSP PROCESSED [illegible]

LINE-STRIP DATA SHEET
~~MATURE TREE~~ STRATUM cont.
Shrub

Project 83
Sheet 2 of 2

getation Type Mixed Brush Transect # MB21 Type [illegible]
25 R 100W S [illegible] 1/4 1/4 S [illegible] SW Transect Length 100 m
spect (degrees) 310° Slope (degrees) [illegible] Elevation (feet) 8200
ield Analyst(s) DPH, PTD, DCK Date 5/26/76
te Description [illegible] QA Check [illegible] 6-1-76

pecies	Code #	Phenology Code	1	2	3	4	5	Condition

Column group above quadrat numbers: # in each 6 x 20 m quadrat

Intercepts (m)

pecies	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	Trunk Diameter (cm) of Each Tree
mut	17.01	18.09	19.32	20.00	0.00	2.89	15.63	18.76	
	19.20	19.44	0.00	0.82	15.27	15.90	16.05	16.53	
	17.30	20.00	1.81	2.43	3.90	8.62	9.79	13.72	
	14.15	14.74	14.93	16.10	16.22	17.13	5.00	8.02	
	19.94	20.00							
Ieca	15.34	15.36	15.51	18.82					
Chvi	6.98	7.54	11.38	11.52	11.62	11.92	2.30	2.65	
Ildr	4.55	5.26	9.27	9.72	4.73	[illegible]	13.80	14.83	
	18.10	18.82	0.55	0.61	7.75	8.22	11.50	[illegible]	14.48 15.03
Putr	[illegible]	12.74	13.35	14.24	9.01	9.30	9.5-	11.00	
	14.20	15.32							
Ardr	16.15	17.16	17.50	18.13					

[illegible] S REPORT

[illegible]

LINE-STRIP DATA SHEET

SHRUB STRATUM

(33)

Project [illegible]
Sheet 1 of [illegible]

Vegetation Type M[illegible] Transect # 11B, 22[illegible]
T [illegible] R [illegible] S [illegible] ¼ ¼ S [illegible] Transect Length [illegible]
Field Analyst(s) D[illegible], PT[illegible], [illegible]RM Date [illegible]/71 QA Check [illegible]

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	27
2	[illegible]	[illegible]		16	14	10	[illegible]	[illegible]
3 [illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4 [illegible]	[illegible]	[illegible]	[illegible]		[illegible]	1	[illegible]	
5								
6								
7								
8								
9								
10								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
[illegible]	[illegible]		0[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	5[illegible]	[illegible]	[illegible]	[illegible]	9.3[illegible]	[illegible]		13.3[illegible]	[illegible]	[illegible]
	15[illegible]	[illegible].15	[illegible]		15.[illegible]	15.2[illegible]		[illegible]	[illegible]	
	0[illegible]	1.43	[illegible]	[illegible]	6.10	[illegible]		[illegible]	12.[illegible]	[illegible]
	15.[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	3.52	[illegible]	[illegible]
	5.[illegible]	[illegible]	7.[illegible]	[illegible]	[illegible]	[illegible]	9.[illegible]		[illegible]	[illegible]
	12.[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	5.53	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]				11.2[illegible]		[illegible]	1.[illegible]	[illegible]
[illegible]		[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	7.[illegible]		1[illegible]	12.3[illegible]	[illegible]			
	[illegible]			[illegible]		[illegible]	[illegible]	[illegible]		
	[illegible]			[illegible]			[illegible]			
[illegible]	[illegible].70		9.[illegible]	[illegible]	[illegible]			[illegible]		[illegible]
		[illegible]	[illegible]	[illegible]			[illegible]			
	[illegible]							[illegible]		
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11.[illegible]		[illegible]	[illegible]	
	[illegible]							[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]			[illegible]			10.2[illegible]	[illegible]
									[illegible]	

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LINE-STRIP DATA SHEET
MATURE TREE STRATUM

Project [illegible]
Sheet [illegible] of [illegible]

getation Type [illegible]
Transect # MB-22 Type [illegible]
T [illegible] R [illegible] S 26? 1/4 1/4 S SE/S[illegible] Transect Length [illegible] m
Aspect (degrees) [illegible] Slope (degrees) [illegible] Elevation (feet) [illegible]
Field Analyst(s) [illegible] DRY, PTD
Date 4/[illegible]
Site Description
QA Check [illegible] 6-1-76

Species	Code #	Phenology Code	# in each 6 x 20 m quadrat 1	2	3	4	5	Condition
1								
2								
3								
4								
5								

Species	Intercepts (m) I1	I2	I1	I2	I1	I2	I1	I2	Trunk Diameter (cm) of Each Tree
Syer	2.50	4.33	10.70	11.50	12.96	14.4[illegible]	5.00	5.84	
	6.94	[illegible]	9.90	13.10	13.60	14.2			
Artr	[illegible]	15.62							

[illegible] - 235°

LINE-STRIP DATA SHEET

SHRUB STRATUM

Project ______

Sheet 1 of 2

egetation Type Sagebrush

Transect # [illegible]

______ R [illegible] S 3 ¼ ¼ S SE NW

Transect Length ______

ield Analyst(s) [illegible]

Date [illegible]

QA Check ______

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 [illegible]	[illegible]	2	150	52	42	[illegible]	[illegible]	[illegible]
2 [illegible]	[illegible]	2	120	46	41	37	[illegible]	[illegible]
3 [illegible]	520	2	50	0		[illegible]		[illegible]
4 [illegible]	[illegible]	2	65	0	[illegible]		1	[illegible]
5 S[illegible]	[illegible]	2	15	0	[illegible]	[illegible]	5	1
6 [illegible]	[illegible]	2	10	[illegible]		[illegible]	1	
7 [illegible]	020	2	40			[illegible]	[illegible]	[illegible]
8								
9								
10								

Intercepts (m)

Species	I1	I2	I1	I2	I1	I2	I1	I2	I1	I2
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.95	[illegible]	[illegible]	[illegible]	
	1.25	[illegible]	[illegible]	[illegible]	7.20	[illegible]	5.80	[illegible]	[illegible]	[illegible]
	[illegible]	9.70	[illegible]	[illegible]	12.38	[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	.75	11.65	15.00	16.04	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	6.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	15.70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	1.10	1.70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	.15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.75	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5.10	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	1.70	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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LINE-STRIP DATA SHEET

SHRUB STRATUM

Project [illegible]

Sheet 2 of 2

ation Type Sagebrush

Transect # 26

Transect Length

R S ¼ ¼ S

QA Check [illegible] 6-1-76

Analyst(s) Date

es	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5

Intercepts (m)

ies	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	
nT	14.75	14.82									
ma	[illegible]	15.07	19.00	20.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	9.69	9.82	[illegible]	[illegible]	12.00	[illegible]	[illegible]	[illegible]	13.16	[illegible]	
	[illegible]	[illegible]	17.80	[illegible]							
Tr	[illegible]	17.92	[illegible]	[illegible]	[illegible]	[illegible]					

P PROGRESS REPORT

Elevation 6[illegible]
Slope 2°
Aspect: 45° S

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SHRUB STRATUM

Sheet 1 of 2

getation Type Sagebrush Transect # 27

25 R 98W S 12 ¼ ¼ S SW NW Transect Length 100 m

J Analyst(s) Kestrel, McGregor Date 5/26/[illegible] QA Check [illegible]

pecies	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
ArTr	014	2	90	85	51	[illegible]	36	[illegible]
LeEr ([illegible])	Sur 6/[illegible]	2	15	45	2	[illegible]		[illegible]
Syor	033	2	10	1	0	6	11	
ChVi	030	2	100	142	71	2	3	[illegible]
Riau	04[illegible]	2-4	10	0	11	25	49	[illegible]
[illegible]	041	2	15	0	0	1	0	0

Intercepts (m)

Species	I1	I2	I1	I2	I1	I2	I1	I2	I1	I2	
CHVI	0	1.43	2.18	3.00	3.78	3.84	3.92	4.18	4.31	4.70	
	[illegible]	5.48	8.92	9.21	[illegible]	10.65	[illegible]	12.[illegible]	[illegible]	15.[illegible]	
	16.18	16.70	17.2[illegible]	17.45	[illegible]	[illegible]	[illegible]	4.[illegible]	[illegible]	6.45	
	6.64	6.75	7.50	7.35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	17.70	18.40	[illegible]	20.0	[illegible]	[illegible]	[illegible]	6.[illegible]	[illegible]	[illegible]	
	11.65	[illegible]	16.[illegible]	[illegible]	[illegible]	1.40	[illegible]	[illegible]	[illegible]	[illegible]	
	13.18	14.52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.[illegible]	
ArTr	[illegible]	8.40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.[illegible]	[illegible]	20.[illegible]	
	0	0.19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.75	[illegible]	[illegible]	
	[illegible]	5.71	[illegible]	7.[illegible]	[illegible]	[illegible]	[illegible]	12.35	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	12.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.45	[illegible]	5.67	[illegible]	11.05	
Riau	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	13.25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	

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RBOSP PROGRESS REPORT

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SW/NW

LINE STRIP DATA SHEET
SHRUB, TREE SEEDLING STRATUM

Project 83
Sheet 2 of 2

egetation Type Sagebrush
Non-Permanent Transect # (1) 27
Date 5/25/76

Intercepts (cm)

ecies	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
[illegible]	10.65	4.97								
Tv	11.50	11.70	[illegible]	12.52	13.54	12.70	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]						
hvi	19.75	[illegible]								

RBOSP PROGRESS REPORT

ECI
ecology consultants, inc

Slope [illegible] Elevation: 67[illegible]
Aspect [illegible]15°

LINE-STRIP DATA SHEET

SHRUB STRATUM

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Project ________

Sheet 1 of ____

Vegetation Type Sagebrush

Transect # 28

T [illegible] R [illegible] S 11 ¼ ¼ S [illegible]

Transect Length 160 m

Field Analyst(s) [illegible]

Date 5/25 [illegible]

QA Check brw 6-1-76

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 Ar tr	014	2		155	161	112	[illegible]	[illegible]
2 Ch na	037	2		2	0	1	1	[illegible]
3 Ch vi	020	2		40	[illegible]	47	50	[illegible]
4								
5								
6								
7								
8								
9								
10								

Intercepts (m)

Species	I1	I2	I1	I2	I1	I2	I1	I2	I1	I2
Ar tr	[illegible]	1.16	3.11	3.17	3.73	4.41	[illegible]	4.71	7.12	[illegible]
	11.27	11.46	5.14	[illegible]	4.52	[illegible]	[illegible]	[illegible]	19.73	[illegible]
	0.00	0.15	4.99	[illegible]	1.47	[illegible]	[illegible]	[illegible]	9.12	[illegible]
	9.62	9.95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	14.37	15.61	11.95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.06	[illegible]
	2.30	2.41	2.70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.20	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.42	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	2.04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	3.60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ch vi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				

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[illegible] ~~[illegible]~~ 6650

LINE-STRIP DATA SHEET

SHRUB STRATUM

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Project 83

Sheet 1 of 1

egetation Type Sandwash - [illegible]

Transect # 29

[illegible] R [illegible] S 13 ¼ ¼ S [illegible]

Transect Length 100m.

ield Analyst(s) [illegible]

Date 5/21

QA Check [illegible] 6-1-76

pecies	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
ATCA	014	2	50	56	[illegible]	34	54	35
TEGL	031	2	[illegible]	0	3	0	7	[illegible]
[illegible]	020	2	50	0	1	5	[illegible]	5
[illegible]	001	—	100	0	0	1	1	2

Intercepts (m)

ecies		I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	
ATCA	#1	1.15	1.29	5.01	6.15	[illegible]	11.40	17.1	17.25			
	#2	4.3	4.55	5.4	5.0	6.3	6.4	11.2	5.1			
	#3	4.15	5.75	[illegible]	6.50	[illegible]	8.35	9.6	9.15	12.7	13.1	
		12.35	[illegible]									
	#4	[illegible]	[illegible]	5.27	5.52	7.3	9.8	9.15	11.7	15.5	15.25	
		12.1	[illegible]									
	#5	0.17	[illegible]	0.75	0.95	[illegible]	[illegible]	5.1	5.8	7.7	8.9	
		12.9	[illegible]									
TECH	#2	6.55	[illegible]									
	#3	15.4	[illegible]									
CHVI	#2	1.90	2.01	3.35	3.45	4.9	5.2	12.[illegible]	[illegible].1			
	#5	9.5	9.6									

[illegible]

Aspect: [illegible]
Slope: 1°
Elevation: 6380'

LINE-STRIP DATA SHEET

SHRUB STRATUM

Project [illegible]

Sheet 1 of [illegible]

Vegetation Type Sagebrush

Transect # 30

T 1S R 92 S 29 ¼ ¼ S NW NE

Transect Length [illegible]

Field Analyst(s) [illegible]

Date 5/24/76

QA Check [illegible] 6-1-76

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 Artr	[illegible]	2	60cm	78	12½	135	[illegible]	[illegible]
2 Chvi	[illegible]	2	55 cm	28	1	5	11	-
3 Save	[illegible]	2	[illegible]	24	19	30	6	11
4								
5								
6								
7								
8								
9								
0								

Intercepts (m)

Species [illegible]	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
Save 1st	1.35	1.73	2.95	3.22						
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16.80				
3rd	3.02	3.30	3.85	4.62	[illegible]	[illegible]	8.5	8.98	10.15	[illegible]
	1.05	11.05	11.73	12.55	12.50	13.85				
5th	15.12	15.23	15.8	16.02	17.15	17.35	18.30	18.75		
Artr [illegible]	1.79	1.96	3.80	4.02	4.32	4.50	5.01	5.19	6.75	[illegible]
	[illegible]	8.92	[illegible]	[illegible]	12.10	[illegible]	15.30	[illegible]	15.85	[illegible]
	17.98	18.21	17.18	[illegible]	[illegible]	17.92	0.31	0.65	0.85	[illegible]
2nd	[illegible]	1.04	[illegible]	2.25	3.38	[illegible]	3.45	[illegible]	4.05	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	7.25	7.82	[illegible]	8.84	9.93	[illegible]
	[illegible]	[illegible]	11.32	[illegible]	12.10	[illegible]	12.75	13.27	14.02	[illegible]
	[illegible]	16.6	16.22	[illegible]	16.50	16.90	17.05	17.49	15.12	15.23
	18.60	19.01	19.12	[illegible]						
3rd	[illegible]	0.92	1.25	1.34	2.23	2.30	2.43	4.35	4.81	[illegible]

LINE STRIP DATA SHEET
SHRUB, TREE SEEDLING STRATUM

Project 83

Sheet 2 of 2

Vegetation Type Sagebrush

Non-Permanent Transect # 4

Date 5/24/7[illegible]

Species		Intercepts (cm)									
		I1	I2	I1	I2	I1	I2	I1	I2	I1	I2
Chvi	#1	13.94	13.[illegible]	14.75	15.05						
	#4	19.6	20.00								
	#5	11.82	12.05								
Artr	Sage #3	5.72	6.58	7.00	7.22	7.51	8.27	8.90	9.5	10.09	10.5[illegible]
		10.75	11.22	11.5	12.22	12.42	12.85	14.30	14.52	14.62	15.[illegible]
		16.25	17.10	17.55	17.95	18.60	19.20	19.50	20.00		
	#4	0.0	0.72	0.96	1.20	1.50	1.72	2.20	2.4	2.58	3.41
		3.6	8.25	8.5	9.4	10.2	12.25	13.15	13.75	14.25	14.7
	#5	0.00	0.55	1.[illegible]	2.10	2.[illegible]	2.[illegible]	3.15	7.70	8.6[illegible]	9.1[illegible]
		9.50	9.92	10.10	10.80	11.55	11.95	12.07	12.12	12.30	12.95
		13.05	13.82	14.60	15.05	15.70	16.10	16.50	16.85	17.85	18.4[illegible]
		17.[illegible]	19.20	19.7	20.00						

HDOOP PROGR[illegible] PLOT

ecology consultants, inc.

Slope 0-5°
aspect 15°
elev. 8600

LINE-STRIP DATA SHEET

SHRUB STRATUM

Project ____________

Sheet 1 of 1

Vegetation Type [illegible]ge

Transect # 31

T [illegible] R [illegible] S 16 ¼ ¼ S [illegible]

Transect Length ____________

Field Analyst(s) [illegible]

Date [illegible]

QA Check [illegible]

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 A. t.	311	2	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
2 [illegible]	022	2	[illegible]	4		6	[illegible]	
3	035	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
4 Chvi	020	2	1[illegible]	2		[illegible]	[illegible]	112
5 Teca	031	2	1[illegible]	[illegible]	[illegible]	[illegible]	1	
6								
7								
8								
9								
0								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	
Arta	[illegible]	0.5[illegible]	[illegible]	[illegible]	1.33	[illegible]	[illegible]	2.31	[illegible]	4.09	
	[illegible]	1.31	2.21		[illegible]	[illegible]	[illegible]	[illegible]	1.93	19.24	
	19.68	[illegible]	4.00		[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		10.6[illegible]	13.39	
	1.02	2.0[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.37	
	6.32	7.04	2.47	[illegible]	[illegible]	9.10	[illegible]	10.21	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.51	[illegible]	4.05	[illegible]	[illegible]	
	5.31	6.97	7.99	[illegible]	[illegible]	1.94	7.02	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	15.64	[illegible]	[illegible]	[illegible]	17.40	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.37	[illegible]	[illegible]	11.17	[illegible]	
C[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	11.15	[illegible]	[illegible]	[illegible]	11.93	[illegible]	[illegible]	[illegible]	[illegible]		
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.11	[illegible]	[illegible]	[illegible]	
O[illegible]	1.91	2.32	[illegible]	[illegible]	[illegible]	2.21	[illegible]	[illegible]	[illegible]	[illegible]	
	12.96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.40	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	
[illegible]	3.20	[illegible]	3.9[illegible]	[illegible]	[illegible]	[illegible]					

186/021176

FIELD [illegible] REPORT

asp. 11°
well 120°
location: 7800'

LINE-STRIP DATA SHEET

Project 83

SHRUB STRATUM

Sheet 1 of 1

egetation Type Sagebrush
Transect # 32

25 R 99W S 5 ¼ ¼ S SE/NW
Transect Length 100'

ield Analyst(s) [illegible]
Date 5/27/76
QA Check [illegible] 6-1-76

ecies	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
ARTR	014	2	75	83	51	41	58	62
ATCA	0[illegible]	3	50	7	11	2	8	[illegible]
SAVE	029	2	100	5	3			
[illegible]	016	3	25	3	1	8	7	19
ULA	022	2	15	1	1			1
CHNA	014	2	20	1	2	9		
SYOR	033	2	25		1	4		

Intercepts (m)

pecies	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	
ARTR	1.10	2.30	3.92	4.29	4.62	5.75	6.25	7.00	7.01	7.94	
PTL	7.95	8.90	9.21	10.14	10.65	11.70	11.92	12.30	12.50	14.05	
ARTR	14.45	15.60	16.2[illegible]	16.64	19.45	20.00	1.55	2.31	2.42	3.50	
ARTR	3.80	4.53	5.8[illegible]	6.[illegible]	8.38	8.70	8.77	9.70	10.45	10.60	
ARTR	11.13	11.80	12.25	12.55	16.15	16.40	1.78	3.32	5.50	5.80	
ARTR	6.15	6.40	6.98	7.50	7.60	8.30	9.00	9.40	16.75	17.05	
ARTR	18.70	19.10	19.50	19.90	2.23	3.45	3.49	4.10	4.68	5.36	
ARTR	5.34	6.39	6.51	7.7[illegible]	9.25	9.75	11.05	11.10	11.30	12.05	
ARTR	15.20	16.40	18.15	18.50	19.[illegible]	19.50	0.	.11	.62	.90	
~~ATR~~ ARTR	5.64	6.78	8.00	8.70	8.75	9.10	9.42	10.52	10.60	10.90	
ARTR	[illegible]	10.77	11.55	12.[illegible]	15.10	15.50	16.10	17.25	18.32	18.92	
ARTR	19.10	19.35									
[illegible]	14.70	14.98	1.30	1.70	4.10	4.[illegible]	13.60	14.0	14.?	15.05	
ATCA	14.0	14.75	.90	1.60	11.48	12.07	16.0	16.12	15.85	16.05	
SYOR	7.25	7.80									
ATCA	14.43	14.47	15.10	15.[illegible]	15.58	15.82	[illegible]	16.80			
CHNA	15.95	19.20	19.60	[illegible]	1.50	5.50	4.40	4.[illegible]	9.59	11.12	

RBOSP PROGRESS REPORT

186/021176

Aspect 20
[illegible]: 7620'

LINE-STRIP DATA SHEET

Project 83

SHRUB STRATUM

Sheet 1 of 2

Vegetation Type Sagebrush

Transect # 33

T 15 R 99w S 30 ¼ ¼ S SW/SW

Transect Length 100 m

[illegible]d Analyst(s) Ellis/Clark

Date 5/27/76

QA Check [illegible]

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 ARTR	014	2	75	56	64	55	66	34
2 EULA	022	2	15	26		7	39	4
3 SYOR	033	2	30	6	11	21	9	16
4 CHNA	010	2	60	4	18	3	[illegible]	
5 CHVI	020	2	20	15	45	70	85	23
6 AMAL	031	3	50		5	5	5	13
7 TECA	021	2	20					1
8 PIED	002	•						1
9								
10								

Intercepts (m)

Species	I1	I2	I1	I2	I1	I2	I1	I2	I1	I2	
~~[illegible]~~ ARTR	.60	.70	1.70	1.85	5.40	5.42	5.49	5.50	6.66	6.70	
	7.51	7.53	13.0	13.40	14.[illegible]	15.05	16.32	16.40	18.10	[illegible]	
	18.70	19.23	19.42	20.00	0.	.40	1.10	2.00	3.72	3.92	
	4.20	[illegible]	4.47	5.30	5.62	6.05	6.40	6.69	7.[illegible]	7.60	
	8.10	8.20	11.10	11.26	11.7	11.85	12.22	12.46	14.0	14.15	
	14.6	14.20	15.40	15.8	18.55	18.70	19.15	20.00	0.1	.47	
	.70	1.12	1.37	1.60	2.70	3.40	3.80	4.30	4.52	5.60	
	7.66	7.74	10.35	10.50	10.90	11.10	11.74	11.85	13.18	13.65	
	14.2	14.35	[illegible]	[illegible]	15.55	15.85	1.60	3.0	4.50	4.75	
SYOR	11.08	11.20	4.42	4.69	10.55	10.91	11.60	11.93	16.55	16.70	
SYOR	[illegible]	18.[illegible]	[illegible]	[illegible]	14.[illegible]	14.33	15.32	16.25	5.50	5.81	
SYOR	10.35	11.32	17.60	15.53	10.80	14.20	0.	45	.70	1.40	
EULA	6.02	6.10	7.21	7.30	13.82	13.86	~~[illegible]~~	[illegible]			
AMAL	18.90	20.00									
PIED	6.15	6.54									
CHNA	15.42	15.60	15.30	15.53	.60	.95	2.00	2.15	~~5.50~~	~~[illegible]~~	
CHNA	13.15	13.22	9.02	10.30							
CHVI	14.90	14.95	15.40	15.45	2.45	3.15	[illegible]	3.94	[illegible]	8.4	
CHVI	2.60	3.10	7.86	[illegible]	8.60	[illegible]	[illegible]	[illegible]	12.4	12.95	17
CHVI	[illegible]	11.95	5.59	6.12	6.38	6.54	5.75	9.00	12.35	12.32	

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RBOSP PROGRESS REPORT

LINE-STRIP DATA SHEET

Project 83

SHRUB STRATUM

Sheet 2 of 2

ation Type Sagebrush

Transect # 33

R 99w S 30 ¼ ¼ S SW/SW

Transect Length 100 m

ld Analyst(s) Elli/Carl

Date 5/27/76

QA Check [illegible] 6-1-76

cies	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5

Intercepts (m)

ecies	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	
ARTR	4.50	5.20	6.40	6.67	7.92	8.62	9.83	10.50	10.50	11.11	
ARTR	11.30	12.20	16.20	16.92	18.05	18.10	18.40	18.50	8.03	8.10	
	9.81	10.19	11.30	11.80	15.58	16.4	19.35	19.60			
SYOR	18.75	19.40									
	17.60	17.67	3.91	4.09	4.32	4.49					
[illegible]	5.10	[illegible]	9.24	4.40	14.6	11.17	15.42	15.60	17.75		

REPORT

[illegible]

LINE-STRIP DATA SHEET
MATURE TREE STRATUM

Project [illegible]

Sheet 1 of 1

[illegible]tation Type PJ   Transect # 29   Type [illegible]

T 25   R [illegible]   S 11   1/4 1/4 S [illegible]   Transect Length [illegible]

Aspect (degrees) [illegible]   Slope (degrees) 5   Elevation (feet) [illegible]

Field Analyst(s) [illegible]   Date [illegible]

Site Description [illegible]   QA Check [illegible] 6-1-76

Species	Code #	Phenology Code	# in each 6 x 20 m quadrat 1	2	3	4	5	Condition
1 Jos	[illegible]	—	2	3	4	1	2	
2 Pied	[illegible]	—	1	0	2	1	0	
3								
4								
5								

Species	Intercepts (m) I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	Trunk Diameter (cm) of Each Tree
Juos	[illegible]	17.55	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	0	1.43	17.55	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
									[illegible] 47 [illegible]
									[illegible] 47 [illegible]
									[illegible]
									[illegible]
Pied	[illegible]	7.45	[illegible]	11.85	11.10	[illegible]			0. 11
									[illegible] 0
									[illegible] 20
									[illegible] 45
									65. 0

CBOSP PROGRESS REPORT

LINE-STRIP DATA SHEET

Project 83

SHRUB STRATUM

Sheet 2 of 2

Vegetation Type Pinyon Juniper Transect # (5) 28

T 2S R [illegible] S 11 ¼ ¼ S [illegible] Transect Length 100'

Field Analyst(s) [illegible] Date [illegible] QA Check [illegible] 6-1-76

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 [illegible]	004	2	[illegible]	32	[illegible]	71	3	5
2 [illegible]	014	2	20	16	46	53	38	15
3 [illegible]	002	—	45	2	3	1	5	6
4 Tuos	001	—	30	1	1	1	2	0
5 [illegible]	030	[illegible]	40	1	2	0	8	0
6 [illegible]	032	2	15	7	4	0	11	1
7 [illegible]	020	2	25	0	0	1	0	0
8								
9								
10								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
Tuos	1.8[illegible]	2.06	[illegible]	[illegible]						
Ardr	5.52	5.56	7.71	7.79	[illegible]	[illegible]	[illegible]	[illegible]	8.24	8.74
	9.56	9.6[illegible]	1.59	2.01	2.25	2.46	3.08	3.28	4.15	4.45
	[illegible]	[illegible]	15.71	19.46	0.25	0.79	1.25	4.56	4.96	5.18
	6.40	6.79								
[illegible]	7.96	[illegible]	[illegible]	9.15	[illegible]	[illegible]	10.25	10.31	13.22	13.72
	15.72	15.[illegible]5	15.9[illegible]	[illegible]	13.49	14.31	3.51	3.48	4.59	5.0[illegible]
Pin	10.92	11.12								

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RBOSP PROGRESS REPORT

LINE-STRIP DATA SHEET
MATURE TREE STRATUM

(50)

Project 83

Sheet 1 of 2

[illegible]etation Type PJ Transect # 29 Type [illegible]

T 15 R 99W S 15 1/4 1/4 S SW NE Transect Length 100 m

Aspect (degrees) 315 Slope (degrees) 10 Elevation (feet) 6800'

Field Analyst(s) [illegible]

Date 5/21/[illegible]

Site Description many dead Pied, [illegible]

QA Check 6-1-76 [illegible]

Species	Code #	Phenology Code	# in each 6 x 20 m quadrat 1	2	3	4	5	Conditi
1 [illegible]	002	—	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
2 [illegible]	001	—	[illegible]	[illegible]	1	[illegible]	[illegible]	
3								
4								
5								

Species	Intercepts (m) I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	Trunk Diameter (cm) of Each Tree
[illegible] #1	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]
#2	[illegible]	[illegible]							[illegible]
#3	2.32	[illegible]							Juos: 30, 42, 1
#4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
#5									[illegible]
									[illegible]
									[illegible]
									[illegible]
									[illegible]
[illegible] #1	[illegible]	[illegible]	[illegible]	[illegible]					
#2	[illegible]	[illegible]							
#3	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]
#4	[illegible]	[illegible]	[illegible]	[illegible]					
									[illegible]
									[illegible]
									[illegible]

LINE-STRIP DATA SHEET

Project 83

SHRUB STRATUM

Sheet 2 of 7

getation Type PJ

Transect # [illegible] 29

15 R 99 S 15 ¼ ¼ S [illegible]

Transect Length 100 m

eld Analyst(s) [illegible]

Date [illegible]

QA Check [illegible] 6-1-76

cies	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
[illegible]	024	[illegible]	[illegible]	[illegible]	5	[illegible]	--	[illegible]
[illegible]	014	[illegible]	30	[illegible]	1	1	3	–
[illegible]	001	–	130	–	–	•	1	–
[illegible]	002	–	[illegible]	–	1	1	–	–
[illegible]	037	[illegible]	15	–	–	1	[illegible]	–

Intercepts (m)

ies	I1	I2	I1	I2	I1	I2	I1	I2	I1	I2
[illegible]	[illegible]	9.72								
[illegible]	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	15.32	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						

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RBOSP PROGRESS REPORT

LINE-STRIP DATA SHEET
MATURE TREE STRATUM

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getation Type [illegible] Transect # PJ30 Type [illegible]

T [illegible] R 9?W S 1? 1/4 1/4 S SE/NW Transect Length [illegible]

Aspect (degrees) 340° Slope (degrees) 3 Elevation (feet) 7?60

Field Analyst(s) DCK DRM Date 5/26/76

Site Description [illegible] PJ [illegible], [illegible] old trees QA Check [illegible] 6-1-76

Species	Code #	Phenology Code	# in each 6 x 20 m quadrat 1	2	3	4	5	Condition
1 Pied	00?2	—	1	2	10	10	5	[illegible]
2 Juos	001	—	2	2	2	5	2	[illegible]
3								
4								
5								

Species	Intercepts (m) I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	Trunk Diameter (cm) of Each Tree
Pied	4.15	6.20	15.15	20.00	0.00	3.78	13.50	16.85	0.-26,
	1.10	3.01	14.90	15.90	0.00	1.10	0.50	1.73	
	2.30	4.72	6.40	9.50	10.20	13.32	19.65	20.00	0.-50,30
	0.00	4.23	11.35	13.56					
									0.-45,15,13,20,11
									15,12,22,11,L
									0.-16,11,8,14,9,1
									21,12,22,31
									0.-36,10,30,34,
									15
Juos	1.25	6.55	9.76	13.46	6.70	9.70	13.42	13.76	0.16,15
	16.70	17.20	3.22	6.70					
									0. 13, 44
									0. 24,75
									0. 60,13,21,15 [illegible]
									0.-70,16

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LINE-STRIP DATA SHEET

Sheet 1 of 1

SHRUB STRATUM

egetation Type Pinyon Juniper Transect # (PJ-1) 30

T 23 R 95W S 18 ¼ ¼ S SE/NW Transect Length 100m

Field Analyst(s) DRM DCK Date 5/24/76 QA Check bmw 6-1-76

pecies	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
Purshia tridentata	024	2	20	3	4	0	2	1
2 Juniperus osteosperma	001	—	30	3	1	0	3	0
3 Pinus edulis	002	—	40	4	4	0	1	2
4 Artemisia tridentata	011	2	20	0	1	0	0	0
5 Tetradymia canescens	021	2	10	0	0	0	1	0
6								
8								
9								
0								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2

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LINE-STRIP DATA SHEET
MATURE TREE STRATUM

Project [illegible]
Sheet 1 of 1

getation Type Pinyon Juniper
Transect # PT31
Type [illegible]
T 2S R 100W S 25 1/4 1/4 S NW|SW
Transect Length 50 m
Aspect (degrees) [illegible]
Slope (degrees) [illegible]
Elevation (feet) [illegible]
Field Analyst(s) [illegible]
Date [illegible]
Site Description [illegible]
QA Check brm 6-1-76

Species	Code #	Phenology Code	# in each 6 x 20 m quadrat 1	2	3	4	5	Condition
1 Pied	002		3	2	7	[illegible]	[illegible]	[illegible]
2								
3								
4								
5								

Species	Intercepts (m) I1	I2	I1	I2	I1	I2	I1	I2	Trunk Diameter (cm) of Each Tree
Pied	19.44	20.00	[illegible]	5.57	12.66	20.0[illegible]	0.00	1.09	[illegible] 9, 17
	14.08	17.90	19.14	25.00	0.00	2.93	0.95	[illegible]	
	[illegible]	6.10	10.90	14.[illegible]	[illegible]	20.0[illegible]	0.00	[illegible]	[illegible] - 9, [illegible]
	2.33	3.60	[illegible]	9.20	10.8[illegible]	13.20	[illegible]	15.00	
									[illegible] - 12, 15, 4, 10, 34
									18, 17
									- 10, 19, 9, 17,
									19, 11
									[illegible] - 29, 17, 1[illegible],

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LINE-STRIP DATA SHEET

Project [illegible]

SHRUB STRATUM

Sheet 1 of 1

ation Pinyon Juniper Transect # PJ # 31

25 R 100Ws 25 ¼ ¼ S SW/NW Transect Length [illegible] m

ld Analyst(s) [illegible] PTD Date [illegible] QA Check [illegible] 6-1-76

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 Alr	014		[illegible]	[illegible]	36	[illegible]	20	20
2 [illegible]	032	4	[illegible]		8	17	12	4
3 [illegible]	033	[illegible]		9	6	13	6	[illegible]
4 [illegible]	031		12	2	1	3	0	0
5 [illegible]	002		[illegible]	[illegible]	[illegible]	2	5	[illegible]
6 [illegible]	037		10	[illegible]		1	0	0
7	024		[illegible]	[illegible]	0	1	[illegible]	[illegible]
8 CnVi	020	[illegible]	15	0	[illegible]	0	[illegible]	[illegible]
9								
10								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
[illegible]	5.05	0.20	6.01	[illegible]	[illegible]	[illegible]	[illegible]	16.61	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	11.05	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	1.59	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]						
[illegible]	[illegible]	[illegible]								
	[illegible]	[illegible]								
	7.11	[illegible]								

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LINE-STRIP DATA SHEET
MATURE TREE STRATUM

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Sheet 1 of 1

etation Type Pinyon Juniper Transect # 32 Type [illegible]
25 R 99W S 11 1/4 1/4 S SE /SE Transect Length [illegible]
pect (degrees) 180° Slope (degrees) 15° Elevation (feet) [illegible]
eld Analyst(s) [illegible] Date 5/25/76
te Description [illegible] slope, [illegible] QA Check [illegible] 6-1-76

ecies	Code #	Phenology Code	# in each 6 x 20 m quadrat 1	2	3	4	5	Condition
Pied	002	—	2	2	4	3	3	[illegible]
JUOS	001	—	1	1	2	2	2	''

pecies	Intercepts (m) I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	Trunk Diameter (cm) of Each Tree
Pied	3.35	5.20	15.20	18.40	0.0	1.95			Q_1 - 48, 41,
									Q_2 - 10, 85,
									Q_3 - 11, 15, 15, 1
									Q_4 - 20, 22, 17,
									Q_5 - 16, 13, [illegible]
Juos	7.75	9.20	5.30	8.55	15.20	18.32			Q_1 — 44
									Q_2 — 17
									Q_3 - 51, 90
									Q_4 - 10, 56
									Q_5 - 45, 61

[illegible] PROGRESS REPORT

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LINE-STRIP DATA SHEET

SHRUB STRATUM

Project 83

Sheet 1 of 1

Vegetation Type Pinyon Juniper

Transect # 02

T 05 R 99W S 11 ¼ ¼ S SE SE

Transect Length 100 m

Field Analyst(s) DCK DRH

Date 5-17-76

QA Check 6-1-76

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 Artr	[illegible]	2	65	5	9	0	0	15
2 Orpo	[illegible]	2	15	1	5	1	2	0
3 Chvi	020	2	40	0	2	5	12	26
4 Putr	024	2	35	0	0	1	4	0
5 Teca	031	2	20	0	0	0	0	3
6 Pied	002	—	45	2	3	10	9	5
7 Juos	001	—	50	0	1	1	2	1
8								
9								
10								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
Artr	17.79	18.00								
Chvi	4.39	4.52	10.68	10.95	9.13	9.32	12.90	13.22	14.77	14.95
	17.21	17.32								
Pied	14.41	14.60	16.88	17.80	13.60	13.85	18.70	20.00		
	5.10	5.70								
Juos	9.15	10.20	17.20	17.70						

LINE-STRIP DATA SHEET
MATURE TREE STRATUM

Project [illegible]

Sheet 1 of [illegible]

Vegetation Type [illegible]

Transect # [illegible]-33

Type [illegible]

T 1S

R 99W

S [illegible]

1/4 1/4 S [illegible]

Transect Length [illegible]

Aspect (degrees) 341°

Slope (degrees) [illegible]

Elevation (feet) [illegible]

Field Analyst(s) [illegible], MC, DCK

Date 5/25/76

Site Description [illegible]

QA Check [illegible] 6-1-76

Species	Code #	Phenology Code	# in each 6 x 20 m quadrat 1	2	3	4	5	Conditi
1 JUOS	001	—	2	2	[illegible]	0	0	[illegible]
2								
3								
4								
5								

Species	Intercepts (m) I1	I2	I1	I2	I1	I2	I1	I2	Trunk Diameter (cm) of Each Tree
JUOS	12.87	16.[illegible]							Q1: JUOS: 12.[illegible]
									Q2: JUOS: 15.[illegible]
									Q3: JUOS: [illegible]
									[illegible]
									Q4: JUOS – 0
									Q5: JUOS – 0

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LINE-STRIP DATA SHEET

SHRUB STRATUM

Project 33

Sheet 2 of 2

Vegetation Type Pinon-juniper

Transect # (PC-7) 33

T 15 R 99W S 34 ¼ ¼ S SENW

Transect Length 100m

Field Analyst(s) [illegible]

Date [illegible]

QA Check bmw 6-1-76

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 Artr	D11	2	50	[illegible]	[illegible]	37	[illegible]	45
2 Oppo	D27	2	15	31	19	14	6	9
3 [illegible]	001	–	2	3	4	4	0	1
4 Amut	032	2	55	3	1	2	1	0
5 Pied	002	2	35	4	1	2	3	1
6 Chvi	020	2	25	0	1	5	7	26
7								
8								
9								
10								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
Artr	14.26	14.83	15.00	15.33	17.38	17.45	17.50	17.55	19.17	19.30
	.22	.73	2.6	2.97	7.50	7.52	8.46	8.85	9.16	9.35
	12.6	12.71	[illegible]	4.19	5.16	5.70	11.45	11.50	14.01	14.12
	17.34	12.88	12.44	15.10	13.60	13.90	.90	.30	5.67	5.80
	7.55	7.63								
Oppo	11.76	19.72	7.90	7.77	7.2	17.42				
Juos	10.97	11.55								
Chvi	14.17	14.15								

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LINE-STRIP DATA SHEET
MATURE TREE STRATUM

Project [illegible]
Sheet 1 of [illegible]

ation Type Pinyon Juniper   Transect # 3⁴/   Type [illegible]
15   R 99W   S 33   1/4 1/4 S SE/SW   Transect Length [illegible] m
spect (degrees) 100°   Slope (degrees) 5-7°   Elevation (feet) [illegible]
ield Analyst(s) RV, DPM, ??D   Date 5/27/7[illegible]
ite Description [illegible] stand – open understory   QA Check [illegible] 6-1-76
not reproducing young trees [illegible]

pecies	Code #	Phenology Code	1	2	3	4	5	should be 17 ? Condition
			# in each 6 x 20 m quadrat					
Pied	002	—	1	3	6	2	11	[illegible]
Juos	001	–	1	1	2	1	[illegible]	

pecies	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	Trunk Diameter (cm) of Each Tree
	Intercepts (m)								
Pied	0.00	0.35	15.10	17.56	12.12	13.2[illegible]	2.90	3.98	Q_1 - 53
	12.38	17.55	19.15	20.00	0.00	0.11			Q[illegible] 15
									Q_2 - 10
									Q_4 29.14
									Q[illegible] 16 ?
Juos	11.99	20.00	2.3[illegible]	[illegible].12	14.06	15.[illegible]	10.84	12.56	Q_1 - 75
									Q_2 - 135
									Q_3 - 10,25
									Q[illegible] - 33
									Q_5 - [illegible]

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LINE-STRIP DATA SHEET

Project 8[illegible]

SHRUB STRATUM

Sheet 2 of 2

ation Type Pinyon Juniper

Transect # 34

15 R 99W S 33 ¼ ¼ S SE/SW

Transect Length 100'

eld Analyst(s) CPM DCK PTD

Date 5/27/76

QA Check 6-1-76

ecies	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
Pied	002	—	110	4	4	7	0	6
Arar	014	2	35	1	0	0	0	0
Chvi	020	2	20	2	10	3	6	3
Atco	016	2	30	0	0	0	0	20

Intercepts (m)

pecies	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
Chvi	2.53	2.98	6.84	7.67						
Pied	13.08	13.29								
Atco	11.34	11.67	15.91	16.28	19.54	19.66				

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LINE-STRIP DATA SHEET
MATURE TREE STRATUM

Project 13

Sheet 1 of 2

getation Type P[illegible] [illegible] Transect # 35 Type [illegible]

T [illegible] R [illegible] S 3 1/4 1/4 S [illegible] Transect Length [illegible] m

Aspect (degrees) 136° Slope (degrees) 3° Elevation (feet) 7600'

Field Analyst(s) DCK, DPM, PTD Date 5/27/76

Site Description [illegible] QA Check [illegible] 6-1-76

[illegible]

Species	Code #	Phenology Code	# in each 6 x 20 m quadrat 1	2	3	4	5	Conditio
1 Pied	002	–	2	4	3	1	3	[illegible]
2								
3								
4								
5								

Species	Intercepts (m) I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	Trunk Diameter (cm) of Each Tree
Pied	0.0	2.54	14.18	16.66	8.35	19.18	15.80	17.74	Q₁ - [illegible]
									Q₂ - 14, 23, 19 [illegible]
									Q₃ - 16, 20, 21
									Q₄ - 15
									Q₅ - 10, 13, [illegible]

RBOSP PROGRESS REPORT

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LINE-STRIP DATA SHEET

SHRUB STRATUM

Project [illegible]

Sheet 2 of [illegible]

egetation Type P[illegible] J[illegible]

Transect # 35

R [illegible] S 7 ¼ ¼ S [illegible]

Transect Length [illegible]

ield Analyst(s) [illegible]

Date 5/[illegible]/76

QA Check [illegible] 6-1-76

pecies	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
[illegible]	014	[illegible]	[illegible]	61	[illegible]	[illegible]	[illegible]7	5[illegible]
Putr	024	[illegible]	[illegible]	[illegible]	5	11	[illegible]	[illegible]
A[illegible]	[illegible]	[illegible]3	[illegible]	12	11	[illegible]	10	6
P[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	4	[illegible]	4
[illegible]	[illegible]	[illegible]	20	[illegible]	4	1	7	5
[illegible]	[illegible]	[illegible]	30	4	[illegible]	5	4	0
[illegible]	031	[illegible]	15	4	0	0	1	3
[illegible]	[illegible]	[illegible]	10	[illegible]	12	12	4	5

Intercepts (m)

ecies	I1	I2	I1	I2	I1	I2	I1	I2	I1	I2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible].90	[illegible]	[illegible]	11.21	11.78	[illegible]	13.17	13.[illegible]	13.[illegible]5
[illegible]	11.13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.90	[illegible]	1.14	1.48
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.[illegible]	[illegible]	10.05	[illegible]
	11.30	[illegible]	[illegible]	[illegible]	[illegible]	9.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	7.[illegible]	[illegible].3[illegible]	[illegible].24	[illegible]	[illegible]	[illegible]	1.[illegible]	[illegible]	[illegible]	[illegible].19
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5.72	5.85
	7.35	7.92	[illegible]	10.01	[illegible]	[illegible]	[illegible]	17.81		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.53	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.72
	[illegible]	[illegible]	17.[illegible]	[illegible]	19.0[illegible]	19.67	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	19.[illegible]	[illegible]	[illegible]	[illegible]	7.[illegible]	[illegible].35
	[illegible]	15.07								
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
[illegible]	[illegible]	0.54								
	[illegible]	[illegible]	[illegible]	[illegible]	0.[illegible]	[illegible]	[illegible]	7.15	[illegible]	[illegible]
	[illegible]	[illegible]								

[illegible] PROGRESS REPORT

Aspect 225°
Slope 50
[illegible] 8200'

LINE-STRIP DATA SHEET

Project ______

SHRUB STRATUM

Sheet 1 of 1

Vegetation Type Upland Meadow
Transect # 12
T [illegible] R 103W S 20 ¼ ¼ S SE NE
Transect Length [illegible]
Field Analyst(s) [illegible] - McGregor
Date [illegible]
QA Check [illegible] 6-1-76

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 ChVi	020	2	4	71	65	[illegible]	[illegible]	[illegible]
2 Teca	031	2	[illegible]	0	0	2	0	[illegible]
3 [illegible]	014	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
4								
5								
6								
7								
8								
9								
10								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	
ChVi	6.05	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.69	2.99	2.95	3.00	
	10.96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.51	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			

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[illegible] PROGRESS REPORT

59.200

LINE-STRIP METHOD
SHRUB, TREE SEEDLING STRATUM

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Project [illegible]
Sheet 1 of 1

Vegetation Type [illegible]
Permanent Transect # 13
T 1S R 100W S 28 1/4 1/4 S NWSE Transect Length [illegible]
Aspect (degrees) [illegible] Slope (percent) [illegible] Elevation (feet) 645
Field Analyst(s) [illegible] Date [illegible]
Site Description unusually large # of shrubs deeper soil
QA Check [illegible] 6-1-76

Species	Code #	Phenology Code	# in each 6 x 20 m quadrat 1	2	3	4	5	Condition
1 TECA	031	7 [illegible] c	[illegible]	[illegible]	[illegible]		74	
2 ChVi	020	[illegible] c	[illegible]	[illegible]	1		[illegible]	
3 SYOR	033	[illegible] c	1		1	11		
4 AMAL	034	[illegible] c		1			1	
5 ARTR	014						16	
6								
7								
8								
9								
10								

Intercepts (cm)

Species	I_1	I_2	Dia	I_1	I_2	Dia	I_1	I_2	Dia	I_1	I_2	Dia
[illegible]	0.20	0.49		2.1	2.35		3.1	3.75		[illegible]	0.95	
TECA	9.7	13.8		10.5	10.65		11.75	[illegible]		[illegible]	7.65	
[illegible]	.9	.95		[illegible]	[illegible]		14.29	[illegible]		[illegible]	18.20	
[illegible]	19.45	20		0	.25		2.32	[illegible]		[illegible]	4.79	
[illegible]	4.98	4.99		[illegible]	[illegible]		19.15	[illegible]		[illegible]	3.10	
[illegible]	[illegible]	11.15		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		10.45	[illegible]		[illegible]	13.25	
[illegible]	15.65	[illegible]		17.05	[illegible]		[illegible]	[illegible]				
[illegible]	[illegible]	11.5		12.25	12.4							
[illegible]	3.9	[illegible]										
	[illegible]	[illegible]		[illegible]	17.41		[illegible]	[illegible]		11.91	12.00	
	17.46	17.50		[illegible]	17.96		[illegible]	[illegible]		3.55	3.62	
	[illegible]	[illegible]		[illegible]	4.77		11.20	11.90				

RBOSP PROGRESS REPORT

7.0
275°
8600'

LINE-STRIP DATA SHEET

Project

SHRUB STRATUM

Sheet 1 of [illegible]

Vegetation Type [illegible]

Transect # 14

T [illegible] R [illegible] S [illegible] ¼ ¼ S [illegible]

Transect Length m

Fi Analyst(s) [illegible]

Date [illegible] 7- [illegible]

QA Check [illegible] 6-1-76

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 [illegible]	014	[illegible]	15	[illegible]	1	6	[illegible]	1
2 T[illegible]	031	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3 [illegible]vi	02D	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4								
5								
6								
7								
8								
9								
10								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
[illegible]	[illegible]	0.7[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
T[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] PROGRESS REPORT

1°
45"
6755

LINE-STRIP DATA SHEET

SHRUB STRATUM

Project 83

Sheet 1 **of** 1

egetation Type Riparian

Transect # 10

25 **R** 99W **S** 9 **¼ ¼ S** NW NW

Transect Length 100 m

ield Analyst(s) Ell.. / Clark

Date 5/27/76

QA Check [illegible] 6-1-76

				# in each 6 x 20 m quadrat				
pecies	Code #	Phenology	Height (cm)	1	2	3	4	5
PI[illegible]in R10.5	044	4	~~250~~ 250	3	1			
~~[illegible]~~RIAU R10.6	040	4	100	2	1	2		
LIINA	019	2	~~[illegible]~~ 150	8	16	8	19	4
ARTR	014	2	250	17	26	10	20	14
ROWO	041	2	50	6	5			
SASAEX	030	3	250			8		7
TAPE		1	200			1	2	
SYOR	033	2	10			2		
[illegible]								

Intercepts (m)

pecies	I1	I2	I1	I2	I1	I2	I1	I2	I1	I2	
PICE	1.62	4.30									
TAPE	2.70	4.60									
SAEX	6.70	6.95	7.01	7.40	7.42	7.80	17.38	17.43	17.67	17.70	
	0.	0.92	1.03	1.20	2.05	2.30	8.85	8.90	9.19	9.21	
	9.10	9.45	10.2	11.05	11.6	11.75	12.01	12.05	12.25	12.55	
ROWO	18.55	18.90									
SASX	12.55	13.85	17.70	15.80							
LIINA	2.30	3.10	15.50	16.26	15.80	15.94	16.04	17.23	~~[illegible]~~ 15.54	18.45	
	19.35	19.30	.37	1.97	1.90	3.21	5.0	5.4	5.50	5.40	
	8.30	8.85	10.42	12.0	15.15	16.75	4.80	5.60	7.69	8.10	
ARTR											
ARTR	3.15	3.40	4.80	6.40	6.50	7.60	7.65	9.00	14.20	15.42	
ARTR	15.60	16.39	16.65	18.00	19.15	19.20	1.20	2.15	2.40	4.10	
ARTR	4.70	7.10	7.23	7.50	5.98	9.76	9.50	10.40	11.20	12.70	
ARTR	14.10	14.40	15.15	15.73	16.10	16.80	17.19	18.54	.30	1.35	
ARTR	1.55	1.99	2.14	2.46	4.13	4.35	10.17	13.0	0.1	.65	
ARTR	2.35	2.40	3.20	4.15	5.54	7.0	7.50	8.0	8.19	8.31	

RBOSP PROGRESS REPORT

[illegible]
-223"
[illegible] 1°

LINE-STRIP DATA SHEET

SHRUB STRATUM

Project ________

Sheet 1 of 1

Vegetation Type ________ Transect # 11

T ________ R [illegible] S [illegible] ¼ ¼ S [illegible] Transect Length ________

Field Analyst(s) [illegible] Date [illegible] QA Check [illegible] 6-1-76

Species	Code #	Phenology	Height (cm)	# in each 6 x 20 m quadrat 1	2	3	4	5
1 [illegible]	014	[illegible]	[illegible]	15	14	[illegible]		
2 [illegible]	033	[illegible]	[illegible]5	17	[illegible]	[illegible]	[illegible]	[illegible]
3 [illegible]	023	[illegible]	[illegible]	1	[illegible]			
4 [illegible]	019	[illegible]	[illegible]	7	13	11	[illegible]	
5 [illegible] sp.	027	1	[illegible]			[illegible]	1	
6 ATAL	034	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
7 [illegible]	002	–	[illegible]	[illegible]	0	0	[illegible]	
8 [illegible]	041	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	
9								
10								

Intercepts (m)

Species	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2	I_1	I_2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.1[illegible]	1.17	[illegible]	[illegible]	[illegible]	[illegible]
	0.00	[illegible]	1.61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	15.1[illegible]	[illegible]	[illegible]	16.17	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	0.25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]								
[illegible]	[illegible]	[illegible]								

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RBOSP PROGRESS REPORT

1

QUADRAT DATA SHEET
HERBACEOUS STRATUM (30)

Project 83
Sheet 1 of 1

Vegetation Type [illegible]
Transect # 1
T 15 R [illegible] S [illegible] ¼ ¼ S [illegible] Quadrat Size 15
Field Analyst(s) [illegible]
Date [illegible]
QA Check [illegible]

Percent Bare Area N/A

Species	Code #	Phen	Ht. (cm)	1		2		3		4		5		6		7		8		9		10	
				#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
Haplopappus Nuttalii	[illegible]	2	[illegible]	1	T																	1	T
Koeleria Cristata	108	2, 3	1	1	T	1	T			2	1			4	1			7	1			5	1
Agropyron Trachycaulum	764	2	1		1		5				5		15						1		2		3
Clematis Hirsutissima	217	2	1		2																		
Linum Lewisii	[illegible]	2	1			1	T			1	1			10	1			1	T			1	T
Eriogonum [illegible]	128	2	1			1	T																
Physaria Floribunda	145	2	1			1	T			1	T									1	1	2	T
Lithospermum Ruderale	162	2	1					1	2														
Crepis Acuminata	205	2	1					1	1														
Phlox Longifolia	156	2	1							3	1												
Taraxacum Officinale	203	2	1									1	T										
Stipa Comata	116	2	1										2		5		5				1		3
Oryzopsis Hymenoides	100	2	1												3						5		
Poa Sandbergii	[illegible]	3	1														3		2		7		
Eriogonum [illegible]	142	2	1													1	1						
[illegible] Sericea	194	2	1															2	T	1	T	3	1
Senecio Sp.	[illegible]	4	1															3	3				
Sisymbrium Linifolium	[illegible]	3	1																	2	1		
Oenothera [illegible]	[illegible]	2	1																	3	2		
Lomatium Orientale	313	4	V																	1	T		

RBOSF PROGRESS REPORT

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QUADRAT DATA SHEET

HERBACEOUS STRATUM · Sheet 1 of 1

Vegetation Type Mixed Brush Transect # 2

T 25 R 99w S 17 ¼ ¼ S N.W/N.W Quadrat Size .5m

Field Analyst(s) [illegible] / [illegible] Date 5/[illegible] QA Check [illegible] 6-1-76

Percent Bare Area

Species	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
[illegible]	122	2	NA	4	.	1	5	3	10					4	5	2	6	[illegible]	4	1	1	-	1
Poa [illegible]	012	2			5												4						3
[illegible]	194	2		1	1			1	T														
Erigeron pumilus	[illegible]94	3		1	1			3	3							1	T	1	T	4	1		
lupinus argenteus	343	2		[illegible]	[illegible]	2	3							1	1	[illegible]							
antennaria ~~[illegible]~~ rosea	321	3				2	T	1	-														
Agropyron trachycaulum	054	2							10								2				3		1
Poa sandbergii	108	2							10		2								12		5		
crepis acuminata	243	2						1	T											1	2		
Sphaeralcea coccinea	181	2						4	1														
~~[illegible]~~		2	? DATA ?													~~[illegible]~~							
[illegible]	190	2														~~[illegible]~~		1	1				
~~Koeleria [illegible]~~		2	? DATA ?													~~[illegible]~~							
oryzopsis hymenoides	100	2																	2				
[illegible]	174	3																		1	1		
Pachystima myrsinites	1026	2-3														2	2						
Heuchera species	—	2-3														1	2						

The reason for
no data i[illegible]
quad[illegible]
[illegible]
[illegible]
[illegible]
Sc[illegible]

RBOSP PROGRESS REPORT

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QUADRAT DATA SHEET
HERBACEOUS STRATUM 31

Project 83
Sheet 1 of 1

Vegetation Type Mixed Brush
Transect # 3

T 7? R 100W S 24 ¼ ¼ S SE SE Quadrat Size .5 m

Field Analyst(s) Ellis, McGregor Date 5/23/76 QA Check [illegible] 6-1-[illegible]

Quadrat Number

Species	Code #	Phen	Ht. (cm)	1 #	1 C	2 #	2 C	3 #	3 C	4 #	4 C	5 #	5 C	6 #	6 C	7 #	7 C	8 #	8 C	9 #	9 C	10 #	10 C
Percent Bare Area			MA	47		100		[illegible]		[illegible]		17		[illegible]		95		[illegible]		40		[illegible]	
Carex Geyeri	1[illegible]	2	AA		5				5		10		8										
Collinsia Parviflora	214	2		3	T			1	1			6	T									3	T
Osmorhiza Depauperata	24[illegible]	2		1	2			3	5			2	5										
Delphinium Nelsonii	11[illegible]	2		1	T							1	1										
[illegible] Repens	001	4						4	5														
Agropyron Trach.	254	2							T				1		1								
Comandra Umbellata	280	2								2	T			4	1							5	1
Senecio Sphairo	132	2										9	5										
Eriogonum Umbellatum	122	3										1	5										
Erigeron [illegible]	274	4										1	1										
Aster [illegible]	32[illegible]	2										1	1										
Arenaria Congesta	10[illegible]	2												1	1							1	1
Cryptantha Sericea	194	2												1	1								
[illegible]	15[illegible]	2												1	T							[illegible]	T
Viguiera Multiflora	x403	2														1	5					2	2
[illegible]	[illegible]	11																1	1				
[illegible]	100	2																	10		4		[illegible]
Astragalus [illegible]	255	3																				1	1
Lithospermum [illegible]	311	4																				1	T
[illegible]	243	2																				1	1

100/0211 76

4

QUADRAT DATA SHEET
HERBACEOUS STRATUM (32)

Project ______
Sheet 1 of 1

Vegetation Type [illegible]
Transect # 7
T [illegible]S R 10?W S [illegible] ¼ ¼ S [illegible]
Quadrat Size .5m
Field Analyst(s) [illegible]
Date 5/31/76
QA Check [illegible] 6-1-76

Percent Bare Area 11

				Quadrat Number															
				1		2		3		4		5		6		7		8		9		10	
Species	Code #	Phen	Ht.(cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
Carex Geyery	160	4	N.-		20		15		15		15		5		30		5		10		20		2
Delphinium nelsonii	16[illegible]	2		1	T	Ⓐ	20			1	T							1	T				
Polygonum sawatchense	3[illegible]	2		12	1																		
Eriogonum Umbellatum	12[illegible]	2		1	1																		
Collinsia Parviflora	219	4		10	T																		
Agoseris Glauca	211	2		3	1																		
Galium Boreale	2[illegible]	2								2	T			4	1								
Penstemon fremontii	272	2								1	1							1	2				
Achillea Lanulosa	250	2												3	1								
Mahonia Repens	(009)	2														2	4						
Lupinus argenteus	343	2																1	2				

RBOSP PROGRESS REPORT

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QUADRAT DATA SHEET
HERBACEOUS STRATUM

Project 83
Sheet 1 of 1

egetation Type Mixed Brush
Transect # 9

T 15 R 97W S 21 ¼ ¼ S NW/NW Quadrat Size 5 m

ield Analyst(s) [illegible] / [illegible]
Date 5/27/76
QA Check [illegible] 6-1-

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
rcent Bare Area			1/r	—		—		—		—		—		—		—		—		—		—C	
pecies	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
[illegible] nuttl.	155	2	NA	5	2	1	1	2	1	1	1	11	2	7	[illegible]	4	1	3	1	1	T		
Linum lewisi	190	2				1	3																
[illegible]	009	3						4	5	2	1							1	1	1	1		
Balsamorhiza sag	[illegible] 207	4								1	5												
Agropyron [illegible]	054	2									T												
[illegible]	103	2								2	1			1	T	1	T						

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QUADRAT DATA SHEET
HERBACEOUS STRATUM

11

Project 33

Sheet 1 of 1

Vegetation Type Aspen

Transect # 1

T [illegible] R [illegible] S 15 ¼ ¼ S NE [illegible] Quadrat Size

Field Analyst(s) [illegible]

Date [illegible]

QA Check [illegible]

Percent Bare Area NA

Species	Code #	Phen	Ht. (cm)	1 #	1 C	2 #	2 C	3 #	3 C	4 #	4 C	5 #	5 C	6 #	6 C	7 #	7 C	8 #	8 C	9 #	9 C	10 #	10 C
[illegible]	345	2	NA	14	6													1	1				
[illegible] marginata	*066	2			4		5		5		3		T								2		
[illegible]	034	2		1	1	2	1			5	4												
[illegible]	083	1		15	1																		
[illegible]	050	2		3	T																		
[illegible]	117	1				2	1	3	T														
[illegible]	294	2						3	1	24	8	3	1									1	T
[illegible]	1100	2							10		15		15		6		T						
[illegible]	123	2								2	4												
[illegible]	167	2								2	T												
[illegible] sp	087	2										5	2										
[illegible]	340	2																		1	2		
Viola [illegible]	401	2																3	T				

* needs a new number

QUADRAT DATA SHEET
HERBACEOUS STRATUM (12)

Project 83
Sheet 1 of 1

egetation Type [illegible]
Transect # 3
R [illegible] S [illegible] ¼ ¼ S [illegible] Quadrat Size [illegible]
ield Analyst(s) [illegible] Date [illegible] QA Check lun 6-1-71

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
rcent Bare Area			NA																				
ecies	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
igisticum porteri	340	2	NA	10	2			4	1	10	1					2	T	3	1	10	2	11	4
milacina stelleta	247	1-2		2	T			2	T											5	T	6	1
arex geyeri	160	3-4			3				3		10		8		4				12		8		10
ochystima mucernitis	[illegible]	2				2	T																
romus marginatus	066	2									1		2		6				4		T		
ermopsis montana	117	1-2								4	T	4	1	6	1			5	1	5	T	5	1
inara orientalis	294	2-3										4	4	9	5								
quilegia caerulea	[illegible]	2										1	1									2	4
Cirsium sp.	138	2										2	1										
Calium boreale	083	1-2	↓									2	T	5	1			3	T			2	T

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RBOSP PROGRESS REPORT

QUADRAT DATA SHEET
HERBACEOUS STRATUM (19)

Project [illegible]
Sheet 1 of 1

on Type T[illegible]rush
Transect # 1

[illegible] R [illegible] S [illegible] ¼ ¼ S [illegible] Quadrat Size .5
Analyst(s) [illegible] Date [illegible] QA Check [illegible] 6-1-[illegible]

ercent Bare Area 1[illegible]

Species	Code #	Phen	Ht.(cm)	1 #	1 C	2 #	2 C	3 #	3 C	4 #	4 C	5 #	5 C	6 #	6 C	7 #	7 C	8 #	8 C	9 #	9 C	10 #	10 C
Elymus Sinereus	200	2	1-		20		20		20		10		20		15		30		70		10		
Bromus tectorum	067	4			2		8		[illegible]		10		7										
Poa Kcharisoni	312	3,4		50	4	50	2	4	T	40	2	40	1			20	1	20	1	20	3		
Chorispora Tenella	252	4,5				6	2																
Lappula Redowskii	199	4						2	T														
Artemesia Ludoviciana	147	2												2	1					2	1		
Chenopodium ALBum	268	2														1	T						

RBOSP PROGRESS REPORT

HERBACEOUS STRATUM

Sheet 1 of 4

Vegetation Type [illegible]

Transect # —

T 15 R [illegible] S 35 ¼ ¼ S [illegible] Quadrat Size .5

Field Analyst(s) [illegible]

Date [illegible]

QA Check [illegible] 6-1-76

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
Percent Bare Area			NA	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
Species	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
Silarion [illegible]	112	2	[illegible]		[illegible]		[illegible]																
[illegible]	202	2	1		[illegible]		[illegible]		14		[illegible]		[illegible]		5		[illegible]		[illegible]		[illegible]		[illegible]
[illegible]	052	2	1				2		1				1		2				5				
[illegible] Curinea [illegible]	312	3	1	3	1	[illegible]	T											[illegible]	[illegible]		2	5	T
[illegible]	203	6	1	3	[illegible]																		
Poa [illegible]	107	23									[illegible]		6		7		[illegible]		3		4		1
[illegible]	306	[illegible]															[illegible]		4				
[illegible] sp.	130	2																1	T	[illegible]	1		

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QUADRAT DATA SHEET
HERBACEOUS STRATUM

(10)

Project 83
Sheet 1 of 1
Transect # 1

[illegible]ation Type [illegible]
T [illegible] R [illegible] S 31 ¼ ¼ S SE NW Quadrat Size .5
Field Analyst(s) [illegible] Date [illegible] QA Check [illegible] 6-1-76

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
Percent Bare Area			[illegible]	94		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
Species	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
[illegible]	150	2	14	1	2	1	T									1	1			3	1		
Eriogonum [illegible]	178	2	1			2	T	11	10	6	5	3	1					1	1	4	1	2	1
[illegible] Sp.	098	2	1					2	[illegible]			1	1	3	[illegible]							1	1
Sphaeralcea Coccinea	181	2	1									8	2			1	T						
[illegible] hydro[illegible]	100	2	1										T		2								
[illegible]	112	2	1												5								
[illegible]	Y013	2	1													1	1					1	[illegible]

*Unknown
number

[illegible]

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Project [illegible]

HERBACEOUS STRATUM

Sheet 1 of

egetation Type Chadscale

Transect # [illegible]

15 R [illegible] S 25 ¼ ¼ S [illegible] Quadrat Size .5

ield Analyst(s) [illegible] Date [illegible]

QA Check [illegible]

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		1	
ercent Bare Area			NA	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
ecies	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	(
[illegible]	*013	[illegible]	NA	[illegible]	[illegible]			[illegible]	[illegible]					[illegible]						[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]					[illegible]	[illegible]									[illegible]	[illegible]		
[illegible]	312	[illegible]										[illegible]	1										
[illegible]	100	[illegible]																			[illegible]		

*[illegible]
new number

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QUADRANT DATA SHEET
HERBACEOUS STRATUM

Project ____ Sheet 1 of ____

Vegetation Type Scrubbrush Transect # 1

T 15 R 99W S 24 ¼ ¼ S SENE Quadrat Size .5m

Field Analyst(s) EM Date [illegible] QA Check [illegible] 6-1-76

Percent Bare Area NA

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
Species	Code #	Phen	Ht.(cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
Phlox hoodii	209	5	1 in	1	1	1	–	1	1	3	4									3	[illegible]	5	
[illegible]	209	3	|	4	3																		
[illegible]	208	4	|	1	1					2	T												
Haplopappus nuttallii	157	2	|	3	2																		
Oryzopsis hymenoides	100	2	|		3		4		2		5		3		4								
Eriogonum ovalifolium	225	2	|	1	1			1	T														
Sphaeralcea coccinea	181	2	|	9	2	1	T	3	T			1	T	1	T			2	T				
Cryptantha sericea	144	4	|			1	10			2	5											1	
P. sandbergii	102	2,3	|				6		6				2				1						
Agropyron smithii	052	2	|				2						1		6		5		2		T		
Stipa comata	115	2	|						2		2												
[illegible]	156	4	|					2	1			2	1	10	4			2	2	12	1		
[illegible]	316	4	N											2	T								

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QUADRAT DATA SHEET

HERBACEOUS STRATUM

Project ______

Sheet 1 of ______

Vegetation Type Sagebrush

Transect # 2

T 25 R [illegible] S 19 ¼ ¼ S [illegible] SW Quadrat Size .5 m

Field Analyst(s) [illegible]

Date [illegible]

QA Check [illegible]

				Quadrat Number																			
			N!	1		2		3		4		5		6		7		8		9		10	
Percent Bare Area				[illegible]		[illegible]		---		[illegible]		40		69		[illegible]		55		[illegible]		[illegible]	
Species	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
[illegible]	157	3	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	-	[illegible]										
Poa sandbergii	108	2	|		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		1		[illegible]
Trifolium gymnocarpon	170	4	|	1	1	[illegible]	[illegible]			[illegible]		[illegible]	2			[illegible]	[illegible]				1		
Lupinus [illegible]	343	2	|	1	T	[illegible]	[illegible]	1	T	[illegible]	[illegible]	[illegible]	2	2	1	[illegible]	[illegible]					7	4
Erigeron [illegible]	230	[illegible]	|	3	1																		
Crepis occidentalis	334	[illegible]	|			4	2																
Lomatium [illegible]	313	[illegible]	|			[illegible]	[illegible]															-	1
Agoseris [illegible]	211	3	|			3	1																
Agropyron Trach	054	[illegible]	|				[illegible]		5		[illegible]						1		T				
Penstemon caespitosus	103	[illegible]	|			[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	1	1	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]		
Zygadenus [illegible]	406	[illegible]	|			1	1			[illegible]	[illegible]					[illegible]							
Phlox [illegible]	156	[illegible]	|					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1								
Delphinium nelsonii	167	[illegible]	|					1	1														
Crepis acuminata	243	[illegible]	|							3	1			1	T			[illegible]	[illegible]				
Penstemon Sp. S2.27	102	[illegible]	|							[illegible]	[illegible]			1	2	[illegible]	[illegible]	1	[illegible]			1	1
Senecio [illegible]	351	[illegible]	|							[illegible]	[illegible]												
Astragalus purshii	275		|								[illegible]												
Erigeron pumilus	274	[illegible]	|							①	[illegible]									[illegible]	T		
Castilleja chromosa	154	[illegible]	|									[illegible]	[illegible]	1	1	1	1	1	[illegible]	1	T		
Antennaria microphylla	291	[illegible]	|									1	T										
[illegible] s hymenoides	100	2	|												[illegible]								
Ipomopsis aggregata	273		|											1	1					[illegible]	[illegible]		
[illegible] floribunda	175	[illegible]	|											1	[illegible]								
Sphaeralcea coccinea	181	[illegible]	|													[illegible]	[illegible]						
Stipa comata	115	2	|																		1		
Hedysarum boreale	174	3	V																			1	1
[illegible]																							
[illegible]																							

RBOSP PROGRESS REPORT

[illegible]

QUADRAT DATA SHEET
HERBACEOUS STRATUM

Project
Sheet [illegible] of

Vegetation Type [illegible]
Transect # [illegible]
T R [illegible] S [illegible] ¼ ¼ S [illegible] Quadrat Size [illegible]
Field Analyst(s) [illegible]
Date [illegible]
QA Check [illegible]

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
Percent Bare Area			M—	—		—		—		—		—		—		—		—		—		→	
Species	Code #	Phen	Ht.(cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
[illegible]	1[illegible]	[illegible]	[illegible]		[illegible]		[illegible]		5						1								
[illegible]	158	2		1	–																		
[illegible]	128	[illegible]		[illegible]	6	4	4	[illegible]	[illegible]			[illegible]						[illegible]	[illegible]				
[illegible]	053	[illegible]			3																		
[illegible] marginatus	016	[illegible]			[illegible]		[illegible]		10		[illegible]		25		[illegible]				[illegible]		[illegible]		
[illegible]	343	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	—		
[illegible]	130	[illegible]		[illegible]	[illegible]									[illegible]	[illegible]								
[illegible]	083	1		[illegible]	–	13	5							[illegible]	[illegible]			[illegible]	[illegible]				
[illegible]	084	[illegible]				2	4			[illegible]	[illegible]	[illegible]	[illegible]							2	[illegible]		
[illegible]	167	[illegible]				[illegible]	—					[illegible]	T					2	[illegible]				
[illegible]	055	[illegible]				[illegible]	[illegible]					[illegible]	[illegible]			[illegible]							
[illegible]	211	[illegible]										[illegible]	T	4	T			[illegible]	[illegible]				
[illegible]	203	[illegible]									[illegible]	1	1										
[illegible]	304	[illegible]										[illegible]		[illegible]	[illegible]			[illegible]	T	[illegible]	[illegible]		
[illegible]	054	[illegible]																	[illegible]		[illegible]		
Phlox [illegible]	156	[illegible]						[illegible]										[illegible]	[illegible]	[illegible]	–		
[illegible]	220	[illegible]																		16			
[illegible]	202	[illegible]																			1		
[illegible]	212	[illegible]																			[illegible]		
[illegible]	154	[illegible]																			[illegible]		
[illegible] ciliata	245	[illegible]	Y																			1	

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QUADRAT DATA SHEET
HERBACEOUS STRATUM

Project 83
Sheet 1 of 1

Vegetation Type Sagebrush
Transect # 4
T 15 R 94W S 34 ¼ ¼ S SE/SE Quadrat Size .5m
Field Analyst(s) [illegible]
Date [illegible]
QA Check [illegible]

Percent Bare Area 100

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
Species	Code #	Phen	Ht.(cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
[illegible]	1?5	4	NA	1	T			4	2														
Sitanion hystrix	112	2													1				3	3	1		
Lappula redowskii	194	2								1	T					1	T	2	1	2	T		
Senecio multilobatus	251	2								1	T												
Poa Sandbergii	102	2-3									T		1				1						1
Agropyron trachycaulum	?54	2											5/25				T						
Descurainia richardsonii	312	4										3	T	2	T								
Sisymbrium linifolium	316	4												2	1	2	T	4	3	4	1	2	T
Chenopodium leptophyllum	[illegible]	2												4	T			4	T	7	1		
Agropyron Smithii	062	2																			5		1
Bromus tectorum	0107	4																					T

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QUADRAT DATA SHEET Project

HERBACEOUS STRATUM Sheet 1 of 1

Vegetation Type Sagebrush Transect # 5

T [illegible]S R [illegible] S [illegible] ¼ ¼ S [illegible] Quadrat Size .5 m

Field Analyst(s) [illegible] Date [illegible] QA Check [illegible]

Percent Bare Area M

Species	Code #	Phen	Ht. (cm)	1		2		3		4		5		6		7		8		9		10	
				#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
Crepus [illegible]	213	2		5	3	2	1					1	T	[illegible]	[illegible]			2	2			2	1
Senecio integerrimus	[illegible]	3		1	1	[illegible]	[illegible]	1	[illegible]					3	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Erigeron [illegible]	274	3		4	1	1	1	1	1	5	1	3	1	[illegible]	1	5	1			1	1	[illegible]	1
[illegible] Cymata	115	2			5				3		1												
Poa [illegible]	1[illegible]	3			20		[illegible]		[illegible]		[illegible]		1		[illegible]		9		5		[illegible]		[illegible]
Phlox longifolia	[illegible]	2		1	[illegible]			[illegible]	1	[illegible]	[illegible]	2	T								[illegible]	[illegible]	[illegible]
[illegible] Tinch.	[illegible]	2					10		1		1				[illegible]		6		1		[illegible]		[illegible]
Trifolium Gymno.	17[illegible]	4				3	2			[illegible]	[illegible]	4	3	2	1	2	[illegible]	4	2	4	2		
Lomatium [illegible]	313	4				2	[illegible]			4	2					[illegible]	T	2	1		[illegible]		
Criptanth Serisia	1[illegible]4	3				1	T	2	2					1	1	1	T			1	–		
[illegible] fritillaria	*404	4										④	1			4	1						
[illegible] Cremia	121	2												1	T					[illegible]	[illegible]	[illegible]	
Astragalus Purshii	[illegible]	2												2	1								
[illegible]	343	2														[illegible]	T			1	1	[illegible]	
Agoseris Glauca	211	2														1	T			[illegible]	1	1	
Castilleja [illegible]	154	2	V																	[illegible]	[illegible]		

*Assigned number

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HERBACEOUS STRATUM

Sheet 1 of

Vegetation Type Sagebrush

Transect # 6

T 15 R [illegible] S [illegible] ¼ ¼ S NESW Quadrat Size .5

Field Analyst(s) [illegible]

Date [illegible]

QA Check 6-1-76

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
ercent Bare Area			NA	[illegible]		[illegible]		[illegible]														[illegible]	
pecies	Code #	Phen	Ht (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
Sitanion [illegible]	112	2			5				[illegible]						[illegible]								
Lepidium [illegible]	247	2																					
[illegible]	[illegible]	2		[illegible]	1			[illegible]	1														
[illegible]	312	2		[illegible]	1	[illegible]	4	[illegible]	[illegible]														
[illegible]	241	2		1	1																		
[illegible]	252	2					T						[illegible]				50		25				
[illegible]	203	2								[illegible]	1	[illegible]	[illegible]										
Elymus Cinereus	200	2									10				40						[illegible]		[illegible]
Phlox longifolia	156	[illegible]								1	2												
Viola Nuttallii	246	2								1	2												
Poa Sandbergii	102	2									1												
Poa [illegible]	107	2											1				T						

[illegible]

QUADRAT DATA SHEET
HERBACEOUS STRATUM

Project [illegible]
Sheet 1 of 1
Vegetation Type [illegible]
Transect # [illegible]
T 25 R [illegible] S 16 ¼ ¼ S SW NW Quadrat Size .5
Field Analyst(s) [illegible]
Date [illegible]
QA Check [illegible]

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
Percent Bare Area			NA	[illegible]		29		11		32		37		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
Species	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
[illegible]	112	2			1										[illegible]		1						
[illegible]	247	2		[illegible]	[illegible]			[illegible]	T	[illegible]	[illegible]	[illegible]	[illegible]	1	1			[illegible]	[illegible]			[illegible]	
[illegible]	215	2		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	1	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	358	[illegible]		[illegible]	T	[illegible]	T																
[illegible]	[illegible]	[illegible]				[illegible]	[illegible]			[illegible]	3			[illegible]	[illegible]	[illegible]	1	1	T	[illegible]	[illegible]		
[illegible]	316	2						1	[illegible]			[illegible]	3										
[illegible]	570	2																[illegible]	[illegible]		[illegible]		
[illegible]	[illegible]	2	V																			[illegible]	
	280																						

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QUADRAT DATA SHEET

HERBACEOUS STRATUM

Project [illegible]
Sheet 1 of 1

Vegetation Type Upland Meadow
Transect # 1
T 23 R 49[illegible] S 8 ¼ ¼ S NE/NW Quadrat Size .5m
Field Analyst(s) [illegible]
Date [illegible]/7/7[illegible]
QA Check [illegible]

Species	Code #	Phen	Ht.(cm)	1 #	1 C	2 #	2 C	3 #	3 C	4 #	4 C	5 #	5 C	6 #	6 C	7 #	7 C	8 #	8 C	9 #	9 C	10 #	10 C
Percent Bare Area			NA	—		—		—		—		—		—		—		—		—		—	
Haplopappus acaulis	153	3		3	[illegible]	5 3	8 12	4	[illegible]	2	5			1	T	6	15	3 8	2	4	5	4	5
Haplopappus nuttallii	155	2		2	7	5	4			3	1	5	4	2	T			11	4	4	1	13	4
Astragalus spatulatus	292	3		5	[illegible]	5	3	3	1	2	1	2	2	2	1			2	T				
Phlox hoodii	[illegible]	3-4		4	4					4	5	2	6					1	1				
Hymenoxys acaulis	311	2		3	1	3	T	4	1	5	1							1	T			2	T
[illegible]	154	3-4		2	1									2	1			2	1				
Zygadenus paniculatus	405	4		1	1																		
Lomatium orientale	213	4		1	T	2	T	2	T	2	21	3	1	2	T	1	T			1	T		
Poa sandbergii	1[illegible]	2			2		4		2		3		2		1						1		
Agropyron [illegible]	0[illegible]4	2			3		2				3				3		1						5
Arenaria fendleri	215	3		2	T	3	T	3 3	T			3	1					5	T			2	T
Phlox longifolia	156	2		[illegible]	T	3	T					1	T	3	T					10	T		
Calochortus [illegible]	1[illegible]	2		1	T									1	T								
Physaria [illegible]	175	2-3				2	T					3	1							1	T		
Astragalus [illegible]	202	4						1	T					2	T					1	T		
[illegible]	[illegible]	2						[illegible]	1					3	1								
Trifolium [illegible]	123	4						1	T	1	1							2	T	1	1		
Koeleria gracilis	090	2									4		5		3		2		T		2		2
Eriogonum [illegible]	[illegible]	2								1	1	1	1	1	T								
Hedysarum boreale	124	3										1	3										
Sphaeralcea coccinea	181	2										2	T										
Comandra umbellata	220	4												6	5								
Gutierrezia sarothrae	012	2												3	21			3	2	1	T		
Oryzopsis hymenoides	1[illegible]	2												T	1		T		1		5		
Cryptantha [illegible]	1[illegible]4	2												1	T								
Ipomopsis aggregata	[illegible]	4														2	1						
Erigeron pumilus	[illegible]	3														2 4	2						
Penstemon caespitosus	1[illegible]	2																		[illegible]	T	2	T
[illegible]																							

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QUADRAT DATA SHEET

HERBACEOUS STRATUM

17

Project [illegible]

Sheet 1 of 1

Vegetation Type ~~[illegible]~~ Upland Meadow

Transect # 3

T [illegible] R [illegible] S 4 ¼ ¼ S [illegible] Quadrat Size .5m

Field Analyst(s) [illegible] Date [illegible] QA Check [illegible] 6-1-76

59,150

Quadrat Number

Percent Bare Area /12

Species	Code #	Phen	Ht.(cm)	1 #	1 C	2 #	2 C	3 #	3 C	4 #	4 C	5 #	5 C	6 #	6 C	7 #	7 C	8 #	8 C	9 #	9 C	10 #	10 C
[illegible]	040	2			10		2		2		5				5						6		4
[illegible]	108	2			5		3		3		5		10		5		8		12		5		[illegible]
[illegible]	[illegible]	3		15	17	10	6	7	3	9	8	2	11	1	4					4	4	4	2
[illegible]	103	2		3	4	5	4	5	2	2	3			6	5	5	5			2	T	1	1
[illegible]	208	2		1	T					1	1			2	4			1	T				
[illegible]	211	2		2	1			6	5	6	2					6	4			6	3	7	5
[illegible]	159	2		1	T					2	T	2	1	5	1					3	1	3	1
[illegible]	313	4.5		3	1	1	1	1	T	3	1	1	T	2	1	1	1	3	1	5	2	2	T
[illegible]	[illegible]	2			1		6		5				1		6		4		15				2
[illegible]	013	2		1	T	5	3			2	T											3	1
[illegible]	110	2				2	1	2	T	1	T	2	1			2	2			3	1	1	1
[illegible]	101	2						1	T			1	1										
[illegible]	[illegible]	2								1	1	1	1			2	2	2	1				
[illegible]	[illegible]	3								2	T	2	1			2	T	3	T				
[illegible]	173	2-3								1	1	3	2	2	1	1	1	2	2	3	2		
[illegible]	190	2										2	3										
[illegible]	[illegible]	2-3										6	5	2	1	1	T						
[illegible]	[illegible]	3										1	1										

*[illegible]

RBOSP PROGRESS REPORT

QUADRAT DATA SHEET
HERBACEOUS STRATUM

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Project [illegible]
Sheet 1 of 1

egetation Type [illegible]
Transect # 1

[illegible] R [illegible] S [illegible] ¼ ¼ S [illegible] Quadrat Size [illegible]

ield Analyst(s) [illegible]
Date [illegible]
QA Check 6-1-7

[illegible]

rcent Bare Area Nil

ecies	Code #	Phen	Ht.(cm)	1 #	1 C	2 #	2 C	3 #	3 C	4 #	4 C	5 #	5 C	6 #	6 C	7 #	7 C	8 #	8 C	9 #	9 C	10 #	10 C
	290	2				4	4			2	1							3	1				
	054	2	1				3																
	160	2	1			1	1																
	160	2	1				2		2		25		20		5		8		2		1		10
	123	2	1							8	1												
	117	1,2	1							2	T												
	093	2	1													1	T			9	1		
	050	2	1																				1
	004	2	1																			1	1

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QUADRAT DATA SHEET
HERBACEOUS STRATUM

(10.)

Project [illegible]
Sheet 1 of 1

Vegetation Type [illegible]
Transect # 3
T [illegible] R [illegible] S 15 ¼ ¼ S [illegible]
Quadrat Size .5m
Field Analyst(s) [illegible]
Date [illegible]
QA Check [illegible]

Percent Bare Area [illegible]

Species	Code #	Phen	Ht. (cm)	1 #	1 C	2 #	2 C	3 #	3 C	4 #	4 C	5 #	5 C	6 #	6 C	7 #	7 C	8 #	8 C	9 #	9 C	10
[illegible]	[illegible]	3-4			20		5		1		2		20		25		3		10		25	
[illegible]	[illegible]	2				3	4	5	5	3	8	1	1			2	10			[illegible]	2	
[illegible]	[illegible]	2				1	T													[illegible]	1	
[illegible]	[illegible]	2						3	2													
[illegible]	[illegible]	1-2												5	1			2	1	[illegible]	1	
[illegible]	[illegible]	1-2																		2	T	

* [illegible]
[illegible]

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[illegible] PROGRESS REPORT

QUADRAT DATA SHEET
HERBACEOUS STRATUM
(18)

Project 85
Sheet 1 of 1

egetation Type Riparian
Transect # 1

_5 R 99W S 14 ¼ ¼ S SWNW
Quadrat Size .5m

ield Analyst(s) [illegible]
Date 5/22/76
QA Check bem 6-1

				1		2		3		4		5		6		7		8		9		10	
rcent Bare Area			NA																				
ecies	Code #	Phen	Ht.(cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
opyron Repens	305	2	na.		95		95		95		80		75		25		50		15		20		
idago Sp. RL175	130	2	↓	10	5					10	5			10	5	10	25	10	10				
lanTago Major	321	2								10	5	20	10										
raxacum Officinale	203	4												3	2								
ncus balticus	304	2																	30				35
ranunculus Cymb	307	2																		10	50	15	3
rex rostrata	397	3																					45
arex Sp. RL276	068	4																					5

ECOS? PROGRESS REPORT

QUADRAT DATA SHEET
HERBACEOUS STRATUM (16)

Project 83
Sheet 1 of 1

Vegetation Type [illegible]
Transect # [illegible]
T 15 R [illegible] S 30 ¼ ¼ S [illegible] Quadrat Size .5m
Field Analyst(s) [illegible] Date [illegible] QA Check [illegible]

[illegible]

Quadrat Number				1		2		3		4		5		6		7		8		9		10
Percent Bare Area			NA	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]
Species	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#
[illegible]	[illegible]	[illegible]			50		25		35		65		75		35		50		50		[illegible]	
[illegible]	[illegible]	[illegible]		60	3																	
[illegible]	[illegible]	[illegible]		1	T									2	4							
[illegible]	[illegible]	[illegible]				50	8	6	T			75	10	10	1			50	10	[illegible]	[illegible]	[illegible]
[illegible]	312	[illegible]				30	1	1	T	1	T	50	2					3	T	[illegible]	T	[illegible]
Poa [illegible]	107	2					3				5										T	
Solidago Sp. [illegible]	130	2						5	10													
Carex Sp. [illegible]	[illegible]	3															5					
Ranunculus [illegible]	307	2	N													5	T					

QUADRAT DATA SHEET
HERBACEOUS STRATUM (17)

Project [illegible]
Sheet 1 of 1
Transect # 3

tation Type Riparian
15 R 87W S 30 ¼ ¼ S NE SW Quadrat Size .5m
ld Analyst(s) Ellis, McGregor Date 5-22-76 ? QA Check [illegible] 6-1-76

[illegible]

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
rcent Bare Area			NA	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
cies	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
[illegible] repens	305	2			70		55		60		50		40		50		20		40		15		5
[illegible]	207	234						5	4	1	T			1	1								
[illegible]	312	2						10	1	1	1	23	3	30	5	15	5	3	T				
[illegible]	276	2								11	5												
" [illegible]	218	2														2	T			1	T		
[illegible] Sp. 13.176	308	3															3						30
[illegible]	252	3,4																10	5	3	T		
[illegible]	107	2																			1		
Juncus Balticus [illegible]	303	2																					5

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QUADRAT DATA SHEET
HERBACEOUS STRATUM (13)

Project 83
Sheet 1 of 1

tation Type Grassland Sage
Transect # 2

25 R 99W S 8 ¼ ¼ S NW/SE Quadrat Size 5 m

ield Analyst(s) [illegible]
Date 5/21/76
QA Check [illegible] 6-1-7

ercent Bare Area NA

pecies	Code #	Phen	Ht. (cm)	1 #	1 C	2 #	2 C	3 #	3 C	4 #	4 C	5 #	5 C	6 #	6 C	7 #	7 C	8 #	8 C	9 #	9 C	10 #	10 C
Bromus tectorum	067	4			50		15		15		5		T						10		35		
Chenopodium [illegible]	[illegible]	2		25	6	60	10	75	5	55	5	25	5	25	1			50	6	32	7		
Descurainia [illegible]	312	4		15	1	30	3			13	5	23	6	55	10	10	1	5	T	5	T	75	
Lappula redowskii	199	3-4		[illegible]	'	30	8			3	2	35	10	65	12	35	5	30	5			55	
Agropyron Smithii	052	2											2		4		3						
Elymus cinereus	200	2																					

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QUADRAT DATA SHEET
HERBACEOUS STRATUM (14)

Project
Sheet 1 of 1

Vegetation Type Grassland
Transect # 6-3
T 15 R 99W S 16 ¼ ¼ S SENE Quadrat Size .5m
Field Analyst(s) Ellis
Date 5/27/76
QA Check [illegible] 6-1-76

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
Percent Bare Area			NA	—		—		—		—		—		—		—		—		—		—	
Species	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
Ag smithii	[illegible]	2	[illegible]		2						4												
[illegible] viridula	215	2		[illegible]	25	[illegible]	20	30	2	50	8	150	5	200	25					30	3		
Descurainia richardsonii	312	3,4		80	5	35	2	500	80	125	30	75	10	75	20	10	T	60	5	5	T		
[illegible]	199	3,4		4	1	3	T			3	1			3	T								
Agropyron dasystachyum	051	2					10		6		10		10		15		40		25		20		35
Chenopodium album	268	2						45	3	50	3							70	15				
Lepidium montanum	247	2														5	2						

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QUADRAT DATA SHEET
HERBACEOUS STRATUM

(15)

Project [illegible]
Sheet 1 of 7
Transect # 4

Vegetation Type Grassland
T 15 R 99W S 12 ¼ ¼ S NW NW Quadrat Size .5m
Field Analyst(s) [illegible] Date [illegible] QA Check [illegible] 6-1-76

Percent Bare Area NA

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
Species	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	
[illegible]	[illegible]	2	[illegible]	100	30	30	[illegible]	[illegible]	5	50	1	150	25	20	5	20	3	3	T	[illegible]	5		
[illegible]	[illegible]	[illegible]		25	10	[illegible]	8	2	T	25	8	[illegible]	1										
[illegible]	[illegible]	2			20		35		[illegible]		[illegible]		5		25		15		5		10		
[illegible]	[illegible]	2		5	1	5	T	30	10														
[illegible] lepidospinum	[illegible]	3				75	10					30	5										
[illegible]	10-	3	V						5		8		6		3								

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HERBACEOUS STRATUM

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Project

Sheet 1 of 1

egetation Type [illegible]

Transect # 1

15 R [illegible] S [illegible] ¼ ¼ S [illegible] Quadrat Size .5m

ield Analyst(s) [illegible]

Date [illegible]

QA Check [illegible] 6-1-71

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
rcent Bare Area			NA																				
ecies	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
[illegible]	004				T		3		T		1		T				1						2
[illegible]	100				T						1								2				
[illegible]	128	2				5	2	⑩	5														
[illegible]	112	2					1		1												2		2
[illegible] Caespitosa	103					1	T																
[illegible]	201	4.5						4	4	1	1	1	T									2	3
[illegible] pumilis	234	2						3	1														
[illegible]	3[illegible]	2						3	T	1	T												
[illegible] Sandbergii	108	2							3												1		
[illegible] sp.	052	2						2	T	1	T												
[illegible]	243	2								1	1												
[illegible] sericea	194	2										1	T							3	1	6	5
[illegible]	121	2																		5	T		
[illegible]	225	2																		2	T		

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QUADRAT DATA SHEET
HERBACEOUS STRATUM

Project ______ Sheet 1 of 1

Vegetation Type P.J
Transect # 2
15 R 97W S 24 ¼ ¼ S NWNW Quadrat Size .5m
Field Analyst(s) [illegible] Date 5/[illegible] QA Check [illegible]

Percent Bare Area NA

Species	Code #	Phen	Ht.(cm)	1 #	1 C	2 #	2 C	3 #	3 C	4 #	4 C	5 #	5 C	6 #	6 C	7 #	7 C	8 #	8 C	9 #	9 C	10 #
[illegible] trachycaulum	[illegible]	2	[illegible]		3		9				1		5		2						3	
[illegible]	155	2	1	1	2	1	T					2	1									
[illegible]	108	2	1		2		2		5		[illegible]		[illegible]				1		[illegible]		3	
Stipa comata	110	2	1		4		3		T		5											
Phlox hoodii	209	5	1			[illegible]		1	T									1	5	2	1	2
Cryptantha [illegible]	190	4	1			2	1											2		2		
[illegible]	274	3	1							1	1					2	T					
[illegible]	208	2	1									1	T									
Arenaria fendleri	315	3	1									2	1	1	T							
Oryzopsis hymenoides	100	2	[illegible]												3		2					

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QUADRAT DATA SHEET

HERBACEOUS STRATUM (42)

Project [illegible]

Sheet 1 of 1

getation Type Pcl

Transect # 3

[illegible] R [illegible] S 12 ¼ ¼ S NWNE Quadrat Size .5m

ield Analyst(s) [illegible] Date [illegible]

QA Check [illegible] 6-1-76

rcent Bare Area 17%

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
cies	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
[illegible]	[illegible]	2			1						1						1		2				
[illegible]	[illegible]	2, 3		1	1	2	1	1	1														
senactis [illegible]	[illegible]	2		1	1					1	1												
[illegible] Fendleri	215	3				2	1																
[illegible]	155	2						1	1		1									1	1		
[illegible]	172	3								1	1					1	1			2	1		
[illegible]	[illegible]	2									T		T										
[illegible]	[illegible]	2												1	T								
[illegible]	[illegible]	3																1	1				
[illegible]	175	3																2	1				
[illegible]	100	2																			2		
[illegible]	[illegible]	5																		1	1		

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QUADRAT DATA SHEET
HERBACEOUS STRATUM

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Project 83
Sheet 1 of 1
Transect # 4

[illegible]etation Type PJ

[illegible] R [illegible] S [illegible] ¼ ¼ S NE Quadrat Size .5m

Field Analyst(s) [illegible] Date [illegible] QA Check Bm 16-1-76

Quadrat Number

Percent Bare Area

Species	Code #	Phen	Ht (cm)	1 #	1 C	2 #	2 C	3 #	3 C	4 #	4 C	5 #	5 C	6 #	6 C	7 #	7 C	8 #	8 C	9 #	9 C	10 #	10 C
[illegible]	190	[illegible]			1		2										2						
[illegible]	192	[illegible]				2	1			2	T	2	T	2	1	[illegible]	[illegible]	[illegible]	2				
[illegible]	194	2				(1)	T											1	T				
[illegible]	155	5						(2)	[illegible]							1	1					[illegible]	[illegible]
[illegible]	2054	[illegible]							[illegible]		[illegible]								6		10		
[illegible]	175	4,5												1	T					[illegible]	[illegible]		
[illegible]	312	4												1	T	6	T	3	T				
[illegible] Ferovi	367	3														2	1	1	T			1	
[illegible] Orientale	313	4,5																2	T				

[illegible]
[illegible]

GROUP PROGRESS REPORT

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HERBACEOUS STRATUM (43).

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Sheet 1 of 1

Vegetation Type Pd

Transect # 5

T 25 R 99W S 14 ¼ ¼ S NE SW Quadrat Size .5 m

Field Analyst(s) Ellis, McGregor Date 5/22/75 QA Check [illegible]

Percent Bare Area NA

Species	Code #	Phen	Ht (cm)	Quadrat Number 1		2		3		4		5		6		7		8		9		10
				#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#
Poa Canbyi	556	2	|		1																	
[illegible] trachycaulum	054	2	|		5		1		T										1		1	
Phlox hoodii	209	234	|	1	1	1	1	1	1			2	2			4	5			1	1	
Poa Sandbergii	108	2	|				2										5					
Trifolium [illegible]	173	2 3	|			5	1			1	1											
[illegible] Nuttallii	155	2	|			1	T	1	T													
[illegible] Caespitosa	103	2	|					2	1							2	1					
Sphaeralcea Coccinea	181	2	|									2	T									
[illegible] Sericea	190	2	|									1	T	2	1	4	1					1
Agropyron Smithii	052	2	|														1					
Astragalus Purshii	225	4	V																			1

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QUADRAT DATA SHEET
HERBACEOUS STRATUM

Project
Sheet 1 of 1

Vegetation Type P J
Transect # 13
T 25 R 99W S 9 ¼ ¼ S SW SW Quadrat Size .5 M
Field Analyst(s) [illegible] McGregor Date [illegible]/23/76 QA Check [illegible] 6-1-76

Percent Bare Area NA

Species	Code #	Phen	Ht (cm)	1 #	1 C	2 #	2 C	3 #	3 C	4 #	4 C	5 #	5 C	6 #	6 C	7 #	7 C	8 #	8 C	9 #	9 C	10 #	10 C
Agropyron Trach.	051	2			5		5		1		2		10		1		1		T				
Trifolium gymnocarpon	[illegible]	4				2	1	1	1	2	T	3	2							1	T		
Stipa comata	115	2					2						T		T						2		
[illegible] acuminata	243	2				1	T									2	T	1	T				
Poa Sandbergii	[illegible]	2							5		1				2				3		3		
Phlox Hoodii	209	4						2	1														
Cryptantha Sericea	144	3						3	1			2	2			1	T	1	1				
Antennaria Parvifolia	×404	4.5						1	1														
Astragalus Purshii	255	3						1	T														
Sphaeralcea Coccinea	181	2						13	1	1	T			9	1								
Carex Sp.	[illegible]	3							5						T								
Bromus Tectorum	067	3									2												
Phlox Longifolia	156	2										6	1	2	T					1	T		
Oryzopsis Hymenoides	100	2											2										
Delphinium Nelsonii	167	2														1	T						
Sisymbrium Linifolium	316	2														2	T						
Erigeron [illegible]	274	2																1	T				
Lomatium Orientale	213	3																		2	-		

[illegible]
number

189/021176

RBOSP PROGRESS REPORT

35

Project

HERBACEOUS STRATUM (47)

Sheet 1 of 1

egetation Type P J

Transect # 15

T 16 R [illegible] S 21 ¼ ¼ S [illegible] Quadrat Size .5m

ield Analyst(s) [illegible] Date 5/2[illegible]/76 QA Check [illegible] 6-1-76

ercent Bare Area NA

				Quadrat Number																			
				1		2		3		4		5		6		7		8		9		10	
ecies	Code #	Phen	Ht. (cm)	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C	#	C
[illegible]	[illegible]	2			7		T		T				T		T								
[illegible]	105	2		1	1					1	1												
[illegible]	310	2				1	T																
[illegible]	102	[illegible]							1								7				20		
[illegible]	100	[illegible]									8		1										
[illegible]	241	[illegible]												6	1								
[illegible]	313	[illegible]												2	T								
[illegible] sp.	[illegible]	[illegible]													4								
[illegible]	274	[illegible]														2	1						
[illegible]	063	[illegible]														1	1						

RCOSP PROGRESS REPORT

2.3.3 Small Mammals

2.3.3.3 Results

Small mammal baseline studies continued this quarter. Field programs were conducted between 15 and 20 May 1976. Sampling efforts included live trapping, removal trapping for analysis of reproductive effort and stomach analysis, and pitfall trapping. Small mammal raw data follow the interpretative text, Section 2.3.3.5.

2.3.3.3.1 Live Trapping and Removal Trapping

2.3.3.3.1.2 Live Trapping

Seven hundred fifty-three individuals representing nine species were captured during the May 1976 trapping session. Table 2.3-22 presents a summary of live trapping results using the number of individuals captured per 100 trap nights (Capture Success) as an indicator of relative abundance. Table 2.3-23 presents the species diversity indices and related parameters for each of the live trapping grids.

Analysis of these data show that of the seven .81 ha grids, Grid 4 (Pinyon-Juniper/Mixed Brush) yielded the greatest number of captures and produced the highest species diversity value. Grid 1 (Bottomland Meadow) exhibited the least number of captures. Only one species was captured on Grids 1 (Bottomland Meadow) and 7 (Upland Meadow), yielding a zero species diversity for these grids. The number of captures on all the 7.29 ha grids (Grids A through E) was similar. Species diversity values varied, however, with Grid B (Pinyon-Juniper, south slope) exhibiting the greatest diverstiy.

Of the two 1.35 ha grids, the greatest number of individuals was captured on Grid G (Aspen) while Grid F (Douglas-Fir) produced the highest species diversity value.

The least chipmunk (Eutamias minimus) was the second most abundant species captured during the May 1976 sampling period, comprising 28.0% of total captures. This species was captured on all but three grids, Grid 1 (Bottomland Meadow), Grid 2 (Sagebrush) and Grid 7 (Upland Meadow). The least chipmunk exhibited its highest capture success on Grids 4 and 5 (Pinyon-Juniper/Mixed Brush and Mixed Brush), supporting results of earlier RBOSP baseline studies indicating that the least chipmunk has an affinity for mixed brush or brushy vegetation. The data indicate that the least chipmunk was at the beginning of its reproductive period during May, as only three juveniles were found in live traps. Table 2.3-24 presents body average

2.3.1.5

Vegetation Raw Data

Table 2.3-22 Small mammal trapping summary by species for all grids sampled during May 1976 sampling period for RBOSP

Grid	Vegetation Type	Number of Individuals of Each Species Captured per 100 Trap Nights (CS)[1]									
		E. minimus	E. quadrivittatus	S. tridecemlineatus	S. lateralis	P. apache	P. manicalatus	P. truei	C. gapperi	M. longicaudus	Grid Total
		N[2]-CS	N-CS	N-CS	N-CS	N-CS	N-CS	N-CS	N-CS	N-CS	N-CS
1	Bottomland Meadow	0	0	0	0	0	5- 3.03	0	0	0	5- 3.03
2	Sagebrush	0	0	3-1.82	0	0	25-15.15	0	0	0	28-16.97
3	Rabbitbrush	12- 7.27	0	0	0	0	26-17.76	0	0	0	38-23.03
4	P-J/Mixed Brush	32-19.39	0	0	2-1.21	1-0.61	15- 9.09	0	0	0	50-30.30
5	Mixed Brush	31-18.79	0	0	0	0	9- 5.45	0	0	0	40-24.24
6	P-J/Sagebrush	13- 7.88	0	0	1-0.6	0	27-16.36	0	0	0	41-24.85
7	Upland Meadow	0	0	0	0	0	20-12.12	0	0	0	20-12.12
A	Greasewood-Sagebrush	35- 5.26	0	0	1-0.15	1-0.15	59- 8.87	0	0	1-0.15	97-14.59
B	Pinyon-Juniper (S)	24- 3.61	18-2.21	0	12-1.80	3-0.45	33- 4.96	6-0.90	0	0	96-14.44
C	Pinyon-Juniper (N)	15- 2.25	6-0.90	0	8-1.20	2-0.30	63- 9.47	0	0	0	94-14.13
D	Sagebrush	21- 3.16	0	0	14-2.10	0	51- 7.67	1-0.15	0	0	87-13.08
E	Mixed Brush	22- 3.31	0	0	1-0.15	0	70-10.53	0	0	1-0.15	94-14.13
F	Douglas Fir	3- 0.98	0	0	0	0	11- 3.61	0	10-3.28	0	24- 7.87
G	Aspen	3- 0.98	0	0	0	0	25- 8.19	0	10-3.26	1-0.33	39-12.79
Species Total[3]		211- 4.14	24-0.47	3-0.06	39-0.77	7-0.13	439- 8.62	7-0.13	20-0.39	3-0.06	753-14.79 (GRAND TOTAL)[4]

[1] (CS) Capture success, derived from the number of individuals captured per 100 trap nights; one trap set for 24 hours is one trap night.

[2] N - Number of observations (i.e., number of individuals captured)

[3] Species total - Capture success (CS) based on the total numbers of individuals captured of species i, per the total number of trap nights set for all grids; CS figure is converted to 100 trap nights form

[4] Grand Total - Total number of all species per total number of trap nights for all grids, converted to 100 trap nights form.

Table 2.3-23. Shannon-Weiner diversity indices (H'), unbiased estimates of H' (E(H')), variance of H' (var (H')), maximum expected value of H' (H' (max)), and equitability (J) for all small mammal grids during sample period 7, May 16-20, 1976, for RBOSP

Grid Designation	Vegetation Type	N[1]	H'	E(H')	var(H')	H'(max)	J
1	Bottomland meadow	1	0.0	0.0	0.0	0.0	0.0
2	Sagebrush	2	0.340	0.491	0.016	0.693	0.491
3	Rabbitbrush	2	0.624	0.122	0.004	0.693	0.900
4	P-J/mixed brush	4	0.854	0.293	0.012	1.386	0.616
5	Mixed brush	2	0.533	0.769	0.007	0.693	0.769
6	P-J/sagebrush	3	0.730	0.664	0.009	1.099	0.664
7	Upland meadow	1	0.0	0.0	0.0	0.0	0.0
A	Greasewood-sagebrush	5	0.812	0.504	0.006	1.609	0.505
B	Pinyon-juniper (S)	6	1.569	0.876	0.004	1.792	0.875
C	Pinyon-juniper (N)	5	1.028	0.639	0.010	1.609	0.639
D	Sagebrush	4	1.001	0.722	0.005	1.386	0.722
E	Mixed brush	4	0.656	0.473	0.006	1.386	0.473
F	Douglas fir	3	0.982	0.894	0.009	1.099	0.893
G	Aspen	4	0.925	0.667	0.017	1.386	0.667

[1] N is the number of species captured

Table 2.3-24 Average live weights (g) for *Eutamias minimus* (least chipmunk) on all small mammal grids during sample period 7, May 16-20, 1976, for RBOSP

		Adult						Juvenile					
		MALE			FEMALE			MALE			FEMALE		
Grid	Vegetation Type	n	Average	Std. Error	n	Average	Std. Error	n	Average	Std. Error	n	Average	Std. Error
1	Bottomland meadow												
2	Sagebrush												
3	Rabbitbrush	8	30.4	± 0.7	3	40.0	± 1						
4	P-J/mixed brush	24	30.9	± 0.5	5	40.8	± 2.1	2	28.5	± .5			
5	Mixed brush	17	30.9	± 0.9	11	35.1	± 1.5						
6	P-J/sagebrush	10	32.2	± 0.9	3	38.7	± 2.7						
7	Upland meadow												
A	Greasewood-sagebrush	24	32.5	± 0.4	9	38.0	± 2.2						
B	Pinyon-juniper (S)	15	31.9	± 0.7	9	42.0	± 1.1	1	16.0	± 0.0			
C	Pinyon-juniper (N)	10	33.2	± 0.8	5	40.2	± 1.3						
D	Sagebrush	10	33.9	± 1.2	11	37.5	± 1.1						
E	Mixed brush	12	30.3	± 0.7	8	37.1	± 2.3						
F	Douglas fir	2	33.0	± 1.0									
G	Aspen	2	35.0	± 1.0	1	40.0	± 0.0						

weights for the least chipmunk, by grid, and by sex and adult-juvenile status.

The Colorado chipmunk (Eutamias quadrivittatus) was the fourth most abundant species captured during the May 1975 sampling period comprising 3.2% of total captures. This species was captured only on two grids, Grid B (Pinyon-Juniper, south slope) and Grid C (Pinyon-Juniper, north slope). Results of earlier RBOSP baseline studies indicate that the Colorado Chipmunk has an affinity for pinyon-juniper vegetation types. This chipmunk was also at the beginning of its reproductive season. No juveniles were captured, but most females were reproductively active. Mean body weights for seven males and seven females captured on Grid B were 46.1±2.4 and 43.7±2.5 g, respectively. Mean body weights for two males and three females captured on Grid C were 53.0±1.0 and 57.0±1.7 g, respectively.

The thirteen-lined ground squirrel (Spermophilus tridecemlineatus) was captured only on Grid 2 (Sagebrush) during the May 1976 sampling session. This species, along with the long-tailed vole (Microtus longicaudus), was the least abundant of the rodent species captured, comprising only 0.4% of total relative abundance. Thirteen-lined ground squirrels have been captured only on the sagebrush grid in the study area. This species, like the other ground squirrel species, was also in the beginning of its reproductive period. Mean body weights for two males and one female were 75.0±10.0 and 82.0±0.0 g, respectively.

The golden-mantled ground squirrel (Spermophilus lateralis) was the third most abundant species captured comprising 5.2% of the total relative abundance. This squirrel was captured on six grids characterized by pinyon-juniper, brush or a mixture of pinyon-juniper-brush vegetation. Only three juveniles were captured, indicating that this species was also at the beginning of its reproductive period. Table 2.3-25 presents body weights for the golden-mantled ground squirrel averaged for each grid, by sex and adult-juvenile status.

The Apache pocket mouse (Perognathus apache) was captured infrequently on four grids, Grid 4 (Pinyon-Juniper Mixed Brush), Grid A (Greasewood-Sagebrush), Grid B (Pinyon-Juniper, south slope) and Grid C (Pinyon-Juniper, north slope). This species comprised only 0.9% of the total relative abundance. Five of the seven captures were in pinyon-juniper vegetation, supporting the view demonstrated in previous RBOSP baseline studies that the Apache pocket mouse has an affinity for this vegetation type. No juveniles were captured. Number of captures during May was insufficient to allow analysis of reproductive status. Mean weights for the six females captured on the three grids ranged from 8.0±0.0 to 10.3±0.3 g.

Table 2.3-25 Average live weights (g) for *Spermophilus lateralis* (golden-mantled ground squirrel) on all small mammal grids during sample period 7, May 16-20, 1976, for RBOSP

		Adult						Juvenile					
		MALE			FEMALE			MALE			FEMALE		
Grid	Vegetation Type	n	Average	Std. Error	n	Average	Std. Error	n	Average	Std. Error	n	Average	Std. Error
1	Bottomland meadow												
2	Sagebrush												
3	Rabbitbrush												
4	P-J/mixed brush				2	175.5	± 4.5						
5	Mixed brush												
6	P-J/sagebrush				1	205.0	± 0.0						
7	Upland meadow												
A	Greasewood-sagebrush				1	170.0	± 0.0						
B	Pinyon-juniper (S)	3	206.7	±1.3	6	194.3	± 4.6				1	66.0	±0.0
C	Pinyon-juniper (N)	3	189.3	±2.8	4	195.0	± 6.6						
D	Sagebrush	7	195.1	±4.9	5	222.0	±13.9				2	100.0	±4.0
E	Mixed brush				1	200.0	± 0.0						
F	Douglas fir												
G	Aspen												

The deer mouse (Peromyscus maniculatus) was the most abundant species captured during the May 1976 sampling period comprising 58.3% of the total relative abundance. This species was captured on all grids and was most abundant on grids with pinyon-juniper-mixed brush, mixed brush or greasewood-sagebrush vegetation. Although an ubiquitous rodent in the study area, the deer mouse as shown in previous RBOSP baseling studies, has demonstrated an affinity for brushy vegetation. Its highest capture success was on grids with a high brush cover. This affinity was supported during the seventh quarter. Analysis of reproductive data indicated that the deer mouse was well into its reproductive season during the May sampling period. Over 20% of the individuals captured were juveniles. Mean body weights for the deer mouse averaged for each grid, by sex and age class are presented in Table 2.3-26.

The piñon mouse (Peromyscus truei) comprised only 0.9% of the total relative abundance of the May 1975 sampling period. This species was captured only on two grids, Grid B (Pinyon-Juniper, south slope) and Grid D (Sagebrush). Six out of seven captures were in pinyon-juniper vegetation supporting the contention that the piñon mouse has an affinity for this vegetation type. Limited capture data during May precludes analysis of reproductive status of the piñon mouse, but its status during May was probably similar to that of the deer mouse. Mean weights for the single adult male, three adult females and single juvenile female captured on Grid B were 21.0±0.0, 21.3±2.9 and 12.0±0.0 g, respectively.

The red-backed vole (Clethrionomys gapperi) was the fifth most abundant species captured, comprising 2.7% of the total relative abundance. This species was captured only on two grids, Grid F (Douglas Fir) and Grid G (Aspen). The red-back vole appears to be restricted to these vegetation types within the study area. No juveniles were captured during the May sampling period indicating that this species may be at the start of its reproductive season. Mean weights for five males and four females captured on Grid F were 18.0±1.0 and 18.0±0.7 g, respectively. Mean weights for six male and three female voles captured on Grid G were 18.2±0.8 and 16.0±1.2 g, respectively.

The long-tailed vole (Microtus longicaudus) was the least abundant of the rodents trapped during the May 1976 sampling period comprising only 0.4% of the total relative abundance. It was captured on three grids, Grid A (Greasewood-Sagebrush), Grid E (Mixed Brush) and Grid G (Aspen). The long-tailed vole has shown an affinity for mixed brush vegetation during past sampling periods. The limited number of captures prevents analysis of reproductive status or habitat affinity for the vole during the May sampling period. The male captured on Grid G weighed 32.0 g while the female captured on Grid E

Table 2.3-26 Average live weights (g) for *Peromyscus maniculatus* (deer mouse) on all small mammal grids during sample period 7, May 16-20, 1976, for RBOSP

		Adult						Juvenile					
		MALE			FEMALE			MALE			FEMALE		
Grid	Vegetation Type	n	Average	Std. Error	n	Average	Std. Error	n	Average	Std. Error	n	Average	Std. Error
1	Bottomland meadow	2	15.5	±0.5	1	18.0	±0.0				2	13.5	±0.5
2	Sagebrush	15	19.6	±0.6	7	20.1	±1.2						
3	Rabbitbrush	11	18.0	±0.7	9	18.9	±0.9						
4	P-J/mixed brush	6	19.2	±1.8	8	20.9	±1.5						
5	Mixed brush	4	19.3	±0.6	3	17.0	±1.0				1	12.0	±0.0
6	P-J/sagebrush	12	19.3	±1.3	8	20.1	±1.4	3	12.7	±1.4	2	12.0	±0.0
7	Upland meadow	8	18.1	±0.8	10	18.9	±0.9	1	13.0	±0.0	1	13.0	±0.0
A	Greasewood-sagebrush	28	19.5	±0.3	18	21.1	±1.1	8	12.0	±0.7	1	11.0	±0.0
B	Pinyon-juniper (S)	11	18.6	±0.7	10	18.4	±0.8	7	13.1	±0.5	2	12.0	±0.0
C	Pinyon-juniper (N)	16	18.9	±0.6	26	21.7	±0.7	9	13.1	±0.7	7	12.0	±0.7
D	Sagebrush	23	18.0	±0.6	16	18.5	±0.7	3	12.6	±0.8	7	12.0	±0.4
E	Mixed brush	39	18.0	±0.3	21	20.0	±0.4	5	13.6	±0.7	4	13.5	±0.5
F	Douglas fir	6	17.3	±1.5	5	19.2	±2.4						
G	Aspen	11	16.9	±0.7	8	21.6	±0.9	2	13.5	±1.5	4	12.25	±0.3

weighed 26.0 g. The female captured on Grid A was not weighed.

Three species captured in previous sampling efforts, the bushy-tailed woodrat (Neotoma cinerea), the montane vole (Microtus montanus) and the sagebrush vole (Lagurus curtatus), were not captured during the May 1976 trapping period.

Capture success during the May 1976 trapping session, as indicated by the total number of individuals captured per 100 trap nights, was higher than any of the previous six trapping periods. The increase in total number of rodents in the study area reflects an increase in the number of deer mice captures, particularly juvenile deer mice during May 1976. The numbers of other rodent species, particularly squirrel species, were approximately the same as in the May 1975 sampling. The number of deer mice, however, increased by 176% over May 1975 captures. This increase in the number of deer mice probably was influenced by the mild winter of 1975-76 (the deer mouse is active year round) which may have reduced overwinter mortality. The reproductive season of the deer mouse may have started earlier this spring due to the mild spring. Ground squirrels, such as the least chipmunk, are hibernators and their populations are influenced less by winter and early spring weather.

2.3.3.3.1.2 Removal Trapping

Twenty-two least chipmunks (8 males, 13 females and one sex unknown), 48 deer mice (29 males and 19 females), and 1 long-tailed vole (one male) were captured and removed for analysis of reproductive effort and/or stomach contents during the May 1976 sampling period. Trapping was conducted in greasewood-sage (yielding 5 least chipmunks and 14 deer mice), pinyon-juniper, south slope (yielding 5 least chipmunks and 5 deer mice, pinyon-juniper, north slope (yielding 3 least chipmunks and 11 deer mice) and aspen (yielding 3 least chipmunks, 7 deer mice and 1 long-tailed vole) vegetation types.

Ten female least chipmunks were analyzed for reproductive effort. Three of the ten were found to be pregnant, one with five embryos, the other two with six each. Live trapping reproductive data indicated that this species was at the start of its reproductive season during the May sampling period. However, the low number of captures precludes analysis of reproductive status and reproductive effort at this time.

Nine least chipmunks were dissected and stomach contents analyzed for seed, plant tissue, and insect food particles. The overall dietary composition of the least chipmunk was 32% seeds, 60% plant matter and 8% insect. Seed composition varied from 0-72%, plant tissue from 26-94% and insects from 0-26%. Stomach contents of two individuals trapped in greasewood contained 45% seed, 37% plant and 18% insect materials. The stomach contents of one individual trapped in pinyon-juniper vegetation were 16% seed, 74% plant and 10% insect materials. Stomach contents of four individuals caught in upland sage consisted of 28% seed, 68% plant and 4% insect materials. Although the least chipmunk has been shown to be primarily a seed eater in earlier RBOSP baseline studies, it eats more plant materials during the spring, when plant growth is available.

Sixteen female deer mice were dissected and analyzed for reproductive effort. Of the 16, only three were to be pregnant. One female possessed five embryos while two females possessed six each. One of the females with the six embryos was on her second litter of this reproductive season (as determined by examination of placental scars). This second litter supports the contention (derived by analysis of live trapping reproductive data) that the deer mouse was well into its reproductive season during the May 1976 sampling session.

Nineteen deer mice were dissected and stomach contents analyzed for seed, plant tissue and insect food particle remains. Overall, the diet of the deer mouse during the May 1976 sampling period consisted of 51% seed, 38% plant and 12% insect material. Individuals varied widely in dietary composition, from 0-94% seed and from 0-86% plant tissue. This variation was greater in deer mice than in least chipmunks. Insect materials found were generally less than 20% of total composition with only one individual with over 50% insect matter in its stomach. Dietary composition also varied between vegetation types. The dietary composition of five deer mice taken in greasewood vegetation was 32% seed, 54% plant material and 14% insect. Stomach contents from four deer mice taken in pinyon-juniper vegetation showed 29% seed, 45% plant material and 25% insect matter. The dietary composition of five individuals trapped in upland sage vegetation was 60% seed, 24% succulent and 10% insect matter, while the stomach contents of five individuals taken in mixed brush vegetation was 71% seed and 29% plant tissue. The difference between the two lower elevation samples (greasewood and pinyon-juniper) and higher elevation samples (upland sage and mixed brush) may be due to the earlier growing season in the lower areas, increasing the availability of plant materials and insects. The deer mouse, although primarily a seed eater, is still rather omnivorous in its dietary habitat and it tends to take advantage of new food sources as they become available.

The dietary composition of the one male long-tailed vole taken in aspen vegetation was 36% seeds and 64% other plant materials.

2.3.3.3.2 Pitfall Trapping

The pitfall trapping program is designed to sample all defined habitats in order to document the presence of "trap shy" small mammals (e.g., shrews). Fifteen pitfall sets, one near each small mammal grid and one in riparian habitat, were operated during the May 1976 sampling period. No new species were caught during this sampling period. Thirteen deer mice (2 adult males, 5 juvenile males and 6 sex undetermined juveniles) and one yet to be identified vole species were captured in pitfall traps during the May 1976 sampling.

2.3.3.5

Small Mammal Raw Data

SMALL MAMMALS

Sheet 1 of 2

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Bottomland meadow Grid 1 Sample Period 7 Trap Night 1

Date, time traps set 5/15/76 0730 Date, time traps checked 5/16/76 0730

Last toe clip # used on previous day 0022 Field Analyst(s) L. Martin

Project 83 QA Check TJ [illegible] 5-25-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
	No captures						

*Key taxonomic characters, physical condition of animal, etc.

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et 2 of 2

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

id Name Bottomland Meadow Grid 1 Sample Period 7 Trap Night 1

te, time traps set 5/15/76 0730 Date, time traps checked 5/16/76 0730

st toe clip # used on previous day 0250 Field Analyst(s) Turner

oject 93 QA Check bew 5-25-76

ot.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
	NO CAPTURES						

y taxonomic characters, physical condition of animal, etc.

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File No. ______________

Sheet 1 of 2

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Bottomland meadow Grid 1 Sample Period 7 Trap Night 2
Date, time traps set 5/16/76 0730 Date, time traps checked 5/17/76 0750
Last toe clip # used on previous day 0022 Field Analyst(s) L. Martin
Project 83 QA Check lmw 5-25-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
	No captures						

RBOSP PROGRESS REPORT

*Key taxonomic characters, physical condition of animal, etc.

070/060175

heet 2 of 2 File No:

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Bottomland Meadow Grid I Sample Period 7 Trap Night 2
)ate, time traps set 0730 5/16/76 Date, time traps checked 0745 5/17/76
Last toe clip # used on previous day 0250 Field Analyst(s) Thm
'roject QA Check 5-25-76

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
	NO CAPtures						

.ey taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 1 Sample Period 7 Trap Night 3

Date, time traps set 0800 5/19/76 Date, time traps checked 0800 5/20/76

Last toe clip # used on previous day 0300 Field Analyst(s) Turner

Project 83 QA Check hm 5-25-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
C-8	PEMA	0310	?	J	13	I	
B-6	PEMA	0320	?	J	14	I	

*Key taxonomic characters, physical condition of animal, etc.

[illegible]CSP PROGRESS REPORT

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eet 2 of 2 SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Meadow Grid 1 Sample Period 7 Trap Night 3

ate, time traps set 5/13/76 0800 Date, time traps checked 5/18/76 0800

ast toe clip # used on previous day 0023 - 0310 Field Analyst(s) Clark

roject 83 QA Check 5-25-76

pt. c.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
	No Captures						

ey taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Bottomland Willow Grid I Sample Period 7 Trap Night 4

Date, time traps set 0830 5/13/76 Date, time traps checked 0730 5/14/76

Last toe clip # used on previous day 0320 Field Analyst(s) Turner

Project 83 QA Check bcw 5-25-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
B-6	pema	0320	F	J	14	I	
B-4	pema	0330	M	A	15	II	

*Key taxonomic characters, physical condition of animal, etc.

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ieet 2 of 2 SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET File No:

rid Name BoTTomLand Meadow Grid 1 Sample Period 7 Trap Night 4

ate, time traps set 5/18/76 0800 Date, time traps checked 5/19/76 0730

ast toe clip # used on previous day 0022 Field Analyst(s) McGregor

roject QA Check bm 5-25-76

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
-3	PEMA	0023	F	A	18	A	

ey taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Bottomland meadow Grid 1 Sample Period 7 Trap Night 5

Date, time traps set 5/19/86 0730 Date, time traps checked 5/20/86 0730

Last toe clip # used on previous day 0023 Field Analyst(s) L. Martin

Project 83 QA Check ____

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
	NO CAPTURES						

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

rid Name Bottomland Meadow Grid 7 Sample Period 7 Trap Night 5

ate, time traps set 0730 5/19/76 Date, time traps checked 0730 5/20/76

ast toe clip # used on previous day 0330 Field Analyst(s) [illegible]

Project

QA Check bmw 5-25-76

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
4-1	PEMA	0320	F	A	4	A	
3-4	PEMA	0340	M	A	16	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Sagebrush Grid 2 Sample Period 7 Trap Night 1

Date, time traps set 5/15/76 (0700) Date, time traps checked 5/16/76 (0700)

Last toe clip # used on previous day 0505/2004 Field Analyst(s) [illegible] / Clark

Project 63 QA Check TK [illegible] 5-25-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
B-9	PEMA	0110 N	M	A	19	I	
B-10	PEMA	0120 N	M	A	20	I	
C-13	PEMA	0130 N	F	A	16	A	swollen vulva
C-13	PEMA	0140 N	M	A	20	A	swollen testes
A-7	PEMA	0150 N	M	A	20	A	" "
A-3	PEMA	0210 N	M	A	24	A	" "
A-1	PEMA	0220 N	M	A	20	I	
C-2	PEMA	2003 N	M	A	19	I	
C-3	PEMA	2154 N	F	A	17	D	pregnant
C-8	PEMA	2010 N	F	A	23	A	pregnant
C-12	PEMA	2020	F	A	26	I	
A-11	PEMA	2030	F	A	[illegible]	A	pregnant
A-1	PEMA	2040	M	A	[illegible]	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

ld Name Sagebrush Grid 2 Sample Period 7 Trap Night 2

e, time traps set 5/16/76 (0700) Date, time traps checked 5/17/76 (0700)

st toe clip # used on previous day 0220/2040 Field Analyst(s) Gary

ject C3 QA Check TT Sam 5-25-76

t. .	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod: Status	Additional Notes*
	PEMA	0220	M	A	U	A	swollen testes
	PEMA	2050	F	A	26	A	pregnant
	PEMA	2005	M	A	U	I	
	PEMA	0150	M	A	U	A	swollen testes
	PEMA	2100	M	A	19	I	
	PEMA	2200	F	J	14	I	

* taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Sagebrush Flat Grid 2 Sample Period 7 Trap Night 2

Date, time traps set 5/16/76 0700 Date, time traps checked 5/17/76 0700

Last toe clip # used on previous day 0220/2040 Field Analyst(s) Clark

Pr[illegible]ect 83 QA Check TT 5-25-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-1	PEMA	0210	M	A	u	D	
A-3	PEMA	0230N	F	A	20	A	preg.
A-7	PEMA	0240N	M	J	12	I	
A-11	PEMA	0110	M	A	u	A	descended testes

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Sagebrush Grid 2 Sample Period 7 Trap Night 3

Date, time traps set 5/17/76 0700 Date, time traps checked 5/18/76 0700

Last toe clip # used on previous day 0240/[illegible] Field Analyst(s) [illegible] / McGregor

Project 83 QA Check bw 5-25-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
-2	PEMA	0250	M	A	16	A	
-3	PEMA	2050	F	A	a	A	
-8	PEMA	0310	M	A	24	A	
-9	PEMA	0320	F	A	16	A	
-11	PEMA	2200	F	A	-u	D	

* Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Sagebrush Grid 2 Sample Period 7 Trap Night 3

Date, time traps set 5/17/76 0700 Date, time traps checked 5/18/76 0700

Last toe clip # used on previous day 0240/2200 Field Analyst(s) Sanz

P[illegible]ect 83 QA Check bsm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-1	PEMA	0220	M	A	U	I	
A 2	PEMA	0230	F	A	U	I	
A-5	SPTR	0055	F	A	82	I	
A-7	PEMA	2100	M	A	U	I	
A-10	PEMA	0120	M	A	U	I	
A-11	SPTR	2300	M	A	85	I	
A-12	PEMA	0110	M	A	U	I	
B-10	PEMA	2020	M	A	U	A	swollen testes
B-7	SPTR	0052	M	A	83	I	

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*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

rid Name Sagebrush flat Grid 2 Sample Period 7 Trap Night 4

ate, time traps set 5/18/76 0700 Date, time traps checked 5/19/76 0700

ast toe clip # used on previous day 2320/2300 Field Analyst(s) Sanz

roject 83 QA Check lum 5-25-76

pt. c.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
1	PEMA	2400	M	A	18	I	
-11	PEMA	2030	F	A	U	I	
-12	PEMA	0130	F	A	U	I	
-11	PEMA	2020	M	A	U	I	
-10	PEMA	0350	F	A	U	A	
-6	PEMA	0150	M	A	U	A	
5-5	PEMA	2010	F	A	U	I	
-4	PEMA	0240	M	A	U	I	

*Key taxonomic characters, physical condition of animal, etc.

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Sheet 2 of 2 SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Sagebrush (Flat) Grid 2 Sample Period 7 Trap Night 4

Date, time traps set 5/18/96 0700 Date, time traps checked 5/19/96 0700

Last toe clip # used on previous day [illegible] Field Analyst(s) L. Martin

Project 83 QA Check lum

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-2	PEMA	0230	F	A	U	A	pregnant
C-3	PEMA	2050	F	A	U	A	pregnant
C-6	SPTR	0390	m	A	65	I	
C-9	PEMA	0310	m	A	U	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 2 Sample Period 7 Trap Night 5

Date, time traps set 5|19|76 [illegible] Date, time traps checked 5|20|76 [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project [illegible] QA Check [illegible] 5-25-76 0

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-2	PEMA	2040	M	A	U	I	
-4	PEMA	3001	M	A	19	A	
A-7	PEMA	0240	M	A	U	I	
A-11	PEMA	0120	[illegible]	A	U	D	
A-12	PEMA	2030	F	A	U	I	
B-5	PEMA	2100	M	A	U	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 2 Sample Period 7 Trap Night [illegible]

Date, time traps set 7/19/76 0700 Date, time traps checked [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project [illegible] QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
[illegible]	[illegible]	[illegible]	M	A	12	[illegible]	
C-2	PEMA	[illegible]	[illegible]	J	9	[illegible]	
C-3	PEMA	[illegible]		A	[illegible]	[illegible]	[illegible]
C-6	[illegible]	[illegible]	[illegible]	J	[illegible]	[illegible]	
C-9	PEMA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
C-11	[illegible]	[illegible]	[illegible]	A	[illegible]	[illegible]	[illegible]
C-12	[illegible]	[illegible]	[illegible]	J	[illegible]	[illegible]	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

rid Name Rabbitbrush Grid 3 Sample Period 7 Trap Night 1

ate, time traps set 5/15/76 1030 Date, time traps checked 5/16/76 1152

ast toe clip # used on previous day 2142 Field Analyst(s) L. Martin

roject 83 QA Check bmw 5-25-76

pt. c.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
-1	PEMA	2143	F	A	18	A	pregnant
-2	EUMI	1311	M	A	U	U	
-5	PEMA	2144	M	A	20	A	
-7	PEMA	2145	F	A	18	A	pregnant
-8	EUMI	1000	F	A	41	A	pregnant
13	PEMA	1353	M	A	17	I	

ey taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 3 Sample Period 7 Trap Night 1

Date, time traps set [illegible] 1030 Date, time traps checked [illegible]

Last toe clip # used on previous day 2012 Field Analyst(s) [illegible]

Project QA Check

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-1	EUMI	2013	M	A	27	A	
A-3	PEMA	1231	M	A	[illegible]	I	
A-4	PEMA	2014	F	A	16	I	
A-6	PEMA	2015	M	A	16	I	
B-7	EUMI	2021	M	A	28	I	
B-8	EUMI	3005	M	A	31	I	
A-10	EUMI	2251	M	A	32	I	
A-11	EUMI	0002	M	A	32	I	
A-12	PEMA	2022	F	A	20	A	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Rabbitbrush Grid 3 Sample Period 7 Trap Night 2

Date, time traps set 5/16/76 1130 Date, time traps checked 5/17/76 1045

Last toe clip # used on previous day 2145 Field Analyst(s) L. Martin

Project 83 QA Check 5-25-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-2	EUMI	1325	F	A	38	D	dead
C-3	PEMA	2151	F	A	20	A	pregnant
C-4	PEMA	2144	m	A	u	A	
C-7	EUMI	2021	m	A	u	I	
C-8	PEMA	2152	m	J	14	I	
C-11	PEMA	2011	m	A	u	I	
C-12	PEMA	1315	F	A	18	A	pregnant
C-13	PEMA	2153	u	J	11	u	
A-13	PEMA	2154	m	J	11	I	
A-12	PEMA	2022	F	A	u	A	pregnant
A-11	PEMA	2301	m	A	15	A	
A-9	PEMA	2302	m	A	17	I	
D-8	PEMA	0432	m	A	18	u	

*Key taxonomic characters, physical condition of animal, etc

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Pit Bitterbrush Grid 3 Sample Period 7 Trap Night 2

Date, time traps set 1130 5/16/7. Date, time traps checked 1130 5/17/8

Last toe clip # used on previous day 2022 Field Analyst(s) Turner

Project 83 QA Check JT

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-1	pema	2023	M	A	30	A	
A-2	pema	2024	F	A	15	I	
A-3	pema	1231	M	A	u	A	
B-4	pema	2014	F	A	u	A	
A-5	pema	2112	M	A	22	A	
B-4	pema	2025	M	A	18	A	

*Key taxonomic characters, physical condition of animal, etc.

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Grid Name RABBITBRUSH Grid 3 Sample Period 7 Trap Night 3

Date, time traps set 1030 5/17/76 Date, time traps checked 1030 5/18/76

Last toe clip # used on previous day 2302 Field Analyst(s) Turner

Project QA Check Jun 5-25-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-2	PEMA	2303	M	A	15	I	
A-3	PEMA	4231	M	A	u	D	
A-4	EUMI	3005	M	A	u	I	
B-4	PEMA	2014	F	A	u	A	
A-6	PEMA	2025	M	A	u	A	
B-6	EUMI	2021	M	A	u	I	
B-9	PEMA	0146	F	Y	15	A	
B-10	PEMA	2304	F	A	21	A	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Rabbit brush Grid 3 Sample Period 7 Trap Night 3

Date, time traps set 5/17/76 1030 Date, time traps checked 5/18/76 1030

Last toe clip # used on previous day 2031-2302 Field Analyst(s) Clark

Project 83 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-4	PEMA	1353	m	A	U	A	swollen neck
C-6	PEMA	2144	m	A	U	A	" "
C-7	PEMA	2152	m	J	U	I	
C-9	PEMA	2031	M	J	14	I	
C-13	EUMI	2032	m	A	33	U	
A-12	Weasel	—					trap death – voucher spec
				—			

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name RABB-Creek Grid 3 Sample Period 7 Trap Night 4

Date, time traps set 1330 5/18/76 Date, time traps checked 0930 5/19/76

Last toe clip # used on previous day 2304 Field Analyst(s) [illegible]

Project 83 (2305) QA Check [illegible] 5-25-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-3	PemA	2224	F	J	u	I	
B-4	PemA	1353	M	A	u	A	
B-5	EumI	3005	m	A	u	I	
B-6	PemA	2112	M	A	u	A	
B-7	PemA	2315	m	A	u	A	
A-13	PemA	2254	m	J	u	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name RabbiTbrush Grid 3 Sample Period 7 Trap Night 4

Date, time traps set 5/4/73 1020 Date, time traps checked 5/5/73 0930

Last toe clip # used on previous day 2032 Field Analyst(s) McGregor

Project

QA Check Lum

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-5	EUMI	1255	M	A	30	I	
C-6	EUMI	2025	M	A	U	I	
C-7	PEMA	2145	F	A	14	I	Sick Lv
C-9	PEMA	4031	F	A	24	A	
C-13	PEMA	4032	M	A	18	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Rabbitbrush Grid 3 Sample Period 7 Trap Night 5

Date, time traps set 5/19/76 0930 Date, time traps checked 5/20/76 1015

Last toe clip # used on previous day 2032 Field Analyst(s) L. Martin

Project 03 QA Check lum 5-25-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-3	PEMA	2151	F	A	u	TL	
C-5	PEMA	[illegible]	m	[illegible]	[illegible]	[illegible]	
C-6	[illegible]	2144	[illegible]	[illegible]	[illegible]	[illegible]	
C-7	P[illegible]	[illegible]	[illegible]	[illegible]	u	[illegible]	
A-13	[illegible]	0204	[illegible]	[illegible]	[illegible]	[illegible]	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 3 Sample Period 7 Trap Night 5

Date, time traps set 0930 5/19/76 Date, time traps checked 1015 5/20/76

Last toe clip # used on previous day 2304 Field Analyst(s) [illegible]

Project 33 QA Check lrm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-2	Pema ?	[illegible]14	F	[illegible]	u	D	[illegible]
B-4	PemA	2112	M	A	u	A	
B-6	Pema	[illegible]	M	A	u	I	
B-8	Pema	1302	F	A	u	A	
A-9	EUMI	0251	M	A	u	I	
A-12	PemA	2022	F	A	u	A	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

rid Name P-J Mixed Br. Grid E4 Sample Period 7 Trap Night 1

te, time traps set 1300 5/15/76 Date, time traps checked 1350 5/16/76

ast toe clip # used on previous day 1015 Field Analyst(s) Turner

roject ____________ QA Check brm 5-25-76

pt. c.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
-12	PEMA	1021	F	A	19	A	gave birth in trap
-11	EUMI	1022	M	A	30	II	
-9	EUMI	1023	M	A	28	I	
-8	PEMA	1441	F	A	20	A	pregnant
-6	PEMA	1024	M	A	19	I	
-5	EUMI	0033	M	A	28	I	
3-5	PEMA	1005	F	A	22	A	
C-3	EUMI	1025	M	A	30	I	
C-2	EUMI	0410	M	A	33	I	

*ey taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name T.J. mixed brush Grid 5 4 Sample Period 7 Trap Night 1

Date, time traps set 5/15/76 1300 Date, time traps checked 5/16/76 1350

Last toe clip # used on previous day 1200 Field Analyst(s) L. Martin

Project 83 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-13	EUMI	0012	M	A	32	I	
A-11	PEMA	1300	F	A	19	A	pregnant
A-9	EUMI	1400	F	A	46	I	
A-2	PEMA	2001	M	A	19	A	
C-1	PEMA	2002	F	A	18	U	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P.J mixedbrush Grid 4 Sample Period 7 Trap Night 2

Date, time traps set 5/16/76 1300 Date, time traps checked 5/17/76 1200

Last toe clip # used on previous day 2002 Field Analyst(s) C. Martin

Project 83 QA Check TS bmw 5-25-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-13	EUMI	2003	M	A	28	I	
A-9	PEMA	1024	M	A	U	U	
A-7	EUMI	2004	M	A	33	I	
A-2	EUMI	2005	M	A	34	U	
C-2	EUMI	2010	M	A	29	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P-5 [illegible] Grid 11 Sample Period 7 Trap Night 2

Date, time traps set [illegible] 1200 Date, time traps checked [illegible] 1200

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project 37 QA Check JT [illegible]

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
-12	EuMI	1031	M	A	33	I	
-11	EuMI	1032	F	A	36	I	
C-10	EuMI	1033	F	A	43	A	
B-10	SpLA	1034	F	A	u	A	
C-9	EuMI	1035	M	A	33	I	
C-7	PEMA	1041	F	A	23	A	
B-6	PEMA	1442	F	A	u	A	
B-5	PEMA	1111	M	A	19	A	
B-4	EuMI	1042	M	A	23	A	
A-4	EuMI	0033	M	A	u	I	

* Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P-3/MIXED Grid 4 Sample Period 7 Trap Night 3

Date, time traps set 5/17/76 1130 Date, time traps checked 5/18 [illegible]

Last toe clip # used on previous day 1042 Field Analyst(s) [illegible]

Project 33 QA Check [illegible] 5-26-76

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
-12	EUMI	1043	M	A	30	I	
-11	EUMI	1044	M	A	30	I	
-10	PEMA	1021	F	A	U	A	
B-9	EUMI	1045	M	A	36	A	
C-8	PEMA	1442	F	A	U	A	
C-7	EUMI	1051	F	A	U	A	
B-7	EUMI	1027	M	A	U	I	
B-6	PEMA	1052	M	A	U	I	
B-5	EUMI	1033	M	A	32	I	
C-4	PEMA	1005	F	A	22	A	
C-2	EUMI	1025	M	A	U	I	

Key taxonomic characters, physical condition of animal, etc.

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Grid Name P-J/mixed brush Grid 4 Sample Period 7 Trap Night 3

Date, time traps set 5/17/76 1130 Date, time traps checked 5/18/76 1130

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project 83 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-12	EUMI	2020	M	A	37	U	
A-11	PEMA	1200	F	A	16	A	lact.
~~A-~~	~~PEMA~~						~~escaped~~
A-8	PEMA	1100	F	A	30	A	preg.
A-7	EUMI	2045	M	A	30	M	
A-6	PEAP	2030	M	A	12	A	swollen testes
A-2	PEMA	2014	M	A	18	A	" "
C-1	PEMA	2002	F	A	U	A	red vulva

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P-J Mixed Brush Grid 4 Sample Period 7 Trap Night 4

Date, time traps set 1130 5/18/76 Date, time traps checked 1015 5/19/76

Last toe clip # used on previous day 1053 Field Analyst(s) Turner

Project 83 QA Check bmj 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-11	EUMI	1054	M	A	23	I	
B-9	EUMI	1055	M	A	30	I	
C-8	PEMA	1442	F	A	u	A	
C-7	EUMI	1101	M	A	33	I	
B-6	PEMA	1024	M	A	u	A	
B-5	PEMA	1052	M	A	u	A	
C-4	EUMI	1102	M	A	30	I	
C-3	EUMI	1103	F	A	33	I	
C-2	EUMI	1104	M	A	30	I	

*Key taxonomic characters, physical condition of animal, etc.

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Sheet 2 of 2 SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P-J Mixed hwd Grid 11 Sample Period 7 Trap Night 4

Date, time traps set 5/8/76 11:30 Date, time traps checked 5/9/76 10:30

Last toe clip # used on previous day 2014 Field Analyst(s) McGregor

Project QA Check bm ✓

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-13	EUMI	2003	M	A	30	I	
A-12	EUMI	1031	M	A	28	I	
L-10	SPLA	1034		A	180	A	Preg. LAC
A-7	PEMA	1005	M	A	24	A	
A 3	PEMA	2040	M	A	16	A	
C-1	PEMA	2001	M	A	18	A	
							RAC[illegible] PROGRESS REPORT

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name PJ/[illegible] Grid 4 Sample Period 7 Trap Night 5

Date, time traps set 5/19/76 1030 Date, time traps checked 1100 5/20/76

Last toe clip # used on previous day 2040 Field Analyst(s) [illegible]

Project [illegible] QA Check bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
-12	EUMI	[illegible]	M	J	U	D	HAVA ART
C-10	SPLA	1034	F	A	U	D	
B-9	PEMA	1021	F	A	U	A	
C-8	PEMA	1442	F	A	U	A	
-6	PEMA	1024	M	A	U	I	
B-5	EUMI	1022	M	A	U	I	
-4	PEMA	0005	F	A	13	A	
C-7	PEMA	2001	M	J	U	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P.J. Mixed Brush Grid 4 Sample Period 7 Trap Night 5

Date, time traps set 5/19/[illegible] 1030 Date, time traps checked [illegible] 1100

Last toe clip # used on previous day 2040 Field Analyst(s) L. Martin

Project 83 QA Check bw

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-12	EUMI	2050	M	J	[illegible]	I	
A-10	PEMA	1100	F	A	[illegible]	U	
A-9	PEMA	1011	M	A	15	D	
A-6	SPLA	2100	F	A	171	I	
C-12	EUMJ	2200	M	J	29	I	

*Key taxonomic characters, physical condition of animal, etc.

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Grid Name MIXED BRUSH Grid 5 Sample Period 7 Trap Night 1

)ate, time traps set 5/15/76 1200 Date, time traps checked 5/16/76 1200

.ast toe clip # used on previous day 2030/4200 Field Analyst(s) Sam / Clark

'roject 83 QA Check TK brw 5-26-76

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
1-2	PEMA	2040 N	M	A	18	I	
A-3	FUMI	1004	M	A	34	I	
A-5	EUMI	2050 N	M	A	34	A	swollen testes
A-6	PEMA	1414	M	A	U	D	
A-8	PEMA	2100 N	M	A	19	I	
-9	FUMI	2200 N	F	A	46	A	preg.
1-10	PEMA	2300 N	M	A	21	I	
1-11	FUMI	0310	F	A	U	D	saved for repro
1-13	FUMI	0430	F	A	38	I	
1-12	PEMA	2400 N	M	A	19	I	
B-10	FUMI	0052	F	A	36	I	
C-1	FUMI	1010	M	A	32	I	
-3	EUMI	4300 N	M	A	32	I	
-4	FUMI	0321	M	A	29	I	
C-6	PEMA	4400 N	F	A	15	I	
-7	EUMI	0130	F	A	31	D	saved for repro
-8	PEMA	1002	M	A	U	A	escaped while weighing
-9	PEMA	1011 N	F	J	12	I	
-10	EUMI	0100	M	A	33	U	
-11	EUMI	0101	F	A	41	A	lactating
-13	FUMI	1012 N	F	A	32	I	

Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Mixed Brush N. Grid 5 Sample Period 7 Trap Night 2

Date, time traps set 5/16/76 1200 Date, time traps checked 5/17/76 1230

Last toe clip # used on previous day 3001-1012 Field Analyst(s) S[illegible]

Project 33 QA Check [illegible] 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-2	EUMI	2050	M	A	[illegible] 4	I	
A-4	PEMA	2100	M	A	[illegible] 4	I	
A-5	EUMI	1004	M	A	34	I	
A-6	PEMA	1002	M	A	18	I	
A-9	EUMI	3001	U	A	31	I	
A-13	EUMI	0430	F	A	33	I	
B-8	PEMA	0300	M	A	[illegible] 4	I	
B-7	EUMI	0300	F	A	33	A	[illegible]
B-6	PEMA	4400	F	A	24	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Mixed Beach N. Grid 5 Sample Period 7 Trap Night 2

Date, time traps set 5/16/76 1200 Date, time traps checked 5/17/76 1200

Last toe clip # used on previous day 2001-1013 Field Analyst(s) Clish

Project 83 QA Check bm

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-4	EUMI	1005	F	A	34	A	swollen vulva
-5	EUMI	0321	F	A	29	A	" "
C-7	EUMI	0210	M	A	32	M	short tail
C-6	EUMI	0101	F	A	29	A	Lact.
-11	EUMI	0230	F	A	36	U	
C-12	PEMA	2400	M	A-J	u	I	Suffering from exp.
B-5	PEMA	1013	F	A	18	A	swollen red vulva

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Mixed brush (north) Grid 5 Sample Period 7 Trap Night 3

Date, time traps set 5/17/76 (1200) Date, time traps checked 5/18/76 (1200)

Last toe clip # used on previous day 3001/ 1012 Field Analyst(s) [illegible]

Project 83 QA Check [illegible] 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-4	EUMI	2050	M	A	U	I	
A-8	PEMA	1002	M	A	20	I	This is definitely the [illegible]
A-10	EUMI	3001	F	A	U	I	[illegible] ?
A-12	EUMI	0430	F	A	U	I	
B-8	PEMA	2100	M	A	U	I	
B-7	EUMI	0210	M	A	U	I	
B-6	EUMI	1004	M	A	U	I	

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*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Mixed brush Grid 5 Sample Period 7 Trap Night 3

Date, time traps set 5/17/76 12:00 Date, time traps checked 5/18/76 12:00

Last toe clip # used on previous day 3001/1013 Field Analyst(s) McGregor

Project 83/63 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-1	FUMI	1200	M	A	28	I	
C-4	FUMI	1014	M	A	30	I	
C-5	FUMI	1005	F	A	32	I	
C-7	FUMI	0240	M	A	36	I	
C-8	FUMI	1015	M	A	32	I	
C-11	FUMI	1021	M	A	30	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Mixed Brush (N) Grid 5 Sample Period 7 Trap Night 4

Date, time traps set 5/18/76 (1200) Date, time traps checked 5/19/76 (1200)

Last toe clip # used on previous day 2011/1021 Field Analyst(s) Sving

Project [illegible] QA Check bw 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-2	EUMI	0321	M	A	U	I	
A-2	[illegible]	2040	M	A	U	I	
A4	[illegible]	0215	[illegible]	[illegible]	U	I	
A-5	EUMI	2,05	M	A	34	I	
A-8	[illegible]	0212	F	A	33	I	
A-2	EUMI	[illegible]	[illegible]	A	31	I	
B-8	EUMI	3010	M	A	30	I	
A-4	[illegible]	1024	M	A	U	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Mixed brush Grid 5 Sample Period 7 Trap Night 4

Date, time traps set 5/18/76 1200 Date, time traps checked 5/19/76 1200

Last toe clip # used on previous day 3021, 1021 Field Analyst(s) L. martin

Project R3 QA Check brm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-4	EUMI	1004	M	A	U	I	
C-5	EUMI	1005	F	A	U	I	
C-6	EUMI	0302	F	A	U	I	
C-7	PEMA	2300	M	A	U	A	
C-11	PEMA	1002	M	A	U	I	
C-12	EUMI	0230	F	A	U	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 5 Sample Period 7 Trap Night [illegible]

Date, time traps set [illegible] 76 [illegible] Date, time traps checked [illegible] 76 [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project [illegible] QA Check 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A 8	[illegible]	[illegible]	[illegible]	A	[illegible]	[illegible]	
A-10	PEMA	1011	F	A	U	[illegible]	
A 12	EUMI	[illegible]	M	[illegible]	18	[illegible]	
A-13	EUMI	0433	F	A	U	[illegible]	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 5 Sample Period 7 Trap Night 5

Date, time traps set 5/19/76 1200 Date, time traps checked 5/20/76 1200

Last toe clip # used on previous day 2001-1021 Field Analyst(s) Clark

Project 63 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-1	Eumi	0321	M	A	U	I	
C-4	PEMA	1013	F	A	U	I	
C-5	Eumi	1005	m	A	U	I	
C-6	Eumi	1005	F	A	U	D	
C-7	Eumi	4200	m	A	u	I	
C-8	Eumi	0240	m	A	u	D	
C-10	Eumi	0210	m	A	U	D	
C-1[illegible]	Eumi	1022	m	A	30	u	

*Key taxonomic characters, physical condition of animal, etc.

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Grid Name [illegible] Grid 6 Sample Period 7 Trap Night 1

Date, time traps set [illegible]/15/76 (1700) Date, time traps checked 5/[illegible] (1700)

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project [illegible] QA Check TT bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-7	PEMA	1010N	M	A	18	I	
[illegible]	EUMI	[illegible]	M	A	32	I	
[illegible]	PEMA	1120N	M	A	19	I	
C-12	PEMA	2002	M	A	20	I	
[illegible]	EUMI	[illegible]	M	A	33	I	
-5	EUMI	0402	F	A	36	A	lactating

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name PJ / Sagebrush Grid 6 Sample Period 7 Trap Night 1

Date, time traps set 5/15/76 1700 Date, time traps checked 5/16/76 1700

Last toe clip # used on previous day 1010-2003 Field Analyst(s) Clark

Project 83 QA Check KK

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-1	PEMA	2003M	F	J-A	18	I	
A-5	PEMA	2004M	F	A	20	A	enlarged vulva
A-8	PEMA	2005M	M	A	20	A	[illegible] testes
A-10	EUMI	0150	F	A	44	I	
A-12	EUMI	0400	M	A	30	I	

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*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P-5/Sage Grid 6 Sample Period 7 Trap Night 2

Date, time traps set 5/16/76 1600 Date, time traps checked 5/17/76 1600

Last toe-clip # used on previous day 2005-4100 Field Analyst(s) Sam

Project 83 QA Check bun 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-2	EUMI	4200	M	A	24	I	
C-3	PEMA	4300	F	A	25	A	pregnant
C-4	PEMA	4400	F	J	14	I	
C-6	SPLA	0054	F	A	205	A	pregnant
C-7	PEMA	1414	F	A	U	D	sac'd for repro.
C-8	PEMA	1011	M	A	32	I	
C-11	PEMA	2005	M	A	~~[illegible]~~ U	I	
B-9	EUMI	1040	M	A	34	I	
B-6	PEMA	1012	M	A	17	J	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P-5/Sage Grid 6 Sample Period 7 Trap Night 2

Date, time traps set 5/16/76 1600 Date, time traps checked 5/17/76 1600

Last toe clip # used on previous day 2005 - 4100 Field Analyst(s) Clark

Project 83 QA Check bm

apt. c.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-1	PEMA	2003	F	A	4	D	
A-4	PEMA	1300	m	A	22	I	
A-5	PEMA	2004	F	A	4	A	swollen red vulva
A-7	PEMA	2010	m	J	14	I	
A-10	EUMI	0150	F	A	40	A	lact.
-12	PEMA	1413	F	A	25	A	preg - recap. but marked wron
A-13	PEMA	2020	F	J	12	I	
B-10	PEMA	2030	m	J	10	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P.J./Goodrich Grid 6 Sample Period 7 Trap Night 3

Date, time traps set 5/17/76 1600 Date, time traps checked 5/18/76

Last toe clip # used on previous day 2020/1012 Field Analyst(s) Sang

Project 83 QA Check lwm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
C-3	PEMA	1005	M	A	U	I	
C-4	PEMA	1012	F	A	23	A	[illegible]
C-11	PEMA	1413	F	A	U	A	[illegible]
C-13	PEMA	1014	M	A	17	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name PJ [illegible] Grid 6 Sample Period 7 Trap Night 3

Date, time traps set 5/17/75 1600 Date, time traps checked 5/18/76 1630

Last toe clip # used on previous day 2030/1012 Field Analyst(s) McGregor

Project ______ QA Check hm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-1	PEMA	2040	M	A	18	A	
A-6	PEMA	2004	F	A	[illegible]	A	
A-10	EUMI	2050	F	A	36	A	
A-11	PEMA	2100	F	A	16	I	
A-12	PEMA	0320	M	A	20	A	
A-13	EUMI	2200	M	A	30	I	
B-6	PEMA	2300	M	A	20	A	
B-4	PEMA	2400	M	A	16	A	

*Key taxonomic characters, physical condition of animal, etc.

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Grid Name [illegible] Grid 6 Sample Period 7 Trap Night 4

Date, time traps set 5/18/76 1500 Date, time traps checked 5/19/76 1500

Last toe clip # used on previous day 200/1014 Field Analyst(s) Sousa

Project 63 QA Check hm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-4	PEMA	1012	F	A	[illegible]	D	[illegible]
C-11	EUMI	1015	M	A	35	[illegible]	
C-13	PEMA	[illegible]	M	A	[illegible]	[illegible]	

*Key taxonomic characters, physical condition of animal, etc.

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Sheet 2 of 2 SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET File No:

Grid Name P.T. Sagebrush Grid 6 Sample Period 7 Trap Night 4

Date, time traps set 5/12/76 1600 Date, time traps checked 5/19/76 1600

Last toe clip # used on previous day 2400, 1014 Field Analyst(s) L. Martin

Project 83 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-1	EUMI	0052	M	A	30	U	
A-2	PEMA	1300	M	A	U	I	
A-11	EUMI	4100	M	A	U	I	
6-11	PEMA	2100	M	A	U	I	
4-6	PEMA	2300	M	A	U	I	
10-6	PEMA	[illegible]	F	A	U	—	
3-9	EUMI	2001	M	A	37	—	
4-10	PEMA	2030	M	J	U	I	
3-10	PEMA	3002	F	J	12	I	
9-11	PEMA	1413	[illegible]	A	U	I	
A-12	PEMA	2003	M	J	10	I	
A-1?	PEMA	0140	F	A	20	U	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P.J./Sagebrush Grid 6 Sample Period 7 Trap Night 5

Date, time traps set 5/19/76 1600 Date, time traps checked 5/20/76 1600

Last toe clip # used on previous day 2300/1415 Field Analyst(s) Sam

Project 83 QA Check brw 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-3	PEMA	1005	M	A	U	I	
C-4	PEMA	2300	M	A	U	D	
C-5	PEMA	1010	M	A	U	I	
C-11	PEMA	1413	F	A	U	D	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P-J / Sagebrush Grid 6 Sample Period 7 Trap Night 5

Date, time traps set 5/19/76 1600 Date, time traps checked 5/20/76 1600

Last toe clip # used on previous day Field Analyst(s) [illegible]

Project 83 QA Check

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
[illegible]	Pema	[illegible]	M	A	[illegible]	?	
[illegible]	PemA	1300	M	A	u	D	
A-6	PemA	2000	F	A	[illegible]	?	
[illegible]	Pema	0150	F	A	u	A	preg. suffering from c.p.
A-11	PemA	0320	M	A	u	D	
A-13	Pemi	2020	F	J	u	?	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 7 Sample Period 7 Trap Night 1

Date, time traps set [illegible] (1500) Date, time traps checked [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project [illegible]

QA Check JT [illegible] 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-13	PEMA	0041N	F	A	22	A	LACT.
A-11	PEMA	0305	F	A	22	A	—
B-9	PEMA	0032	F	A	18	A	—
B-8	PEMA	0042N	M	A	16	A	—
A-6	PEMA	0043 N	M	A	14	I	—
A-5	PEMA	0301	F	A	18	A	LACT

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 7 Sample Period 7 Trap Night 1

Date, time traps set [illegible] Date, time traps checked [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible] / McGregor

Project [illegible] QA Check

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
[illegible]	[illegible]	0120	[illegible]	[illegible]	14	T	—
	[illegible]	0130	[illegible]	[illegible]	17	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	M	[illegible]	[illegible]	[illegible]	—
[illegible]	[illegible]	[illegible]3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	0150	[illegible]	[illegible]	[illegible]	T	

* Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 7 Sample Period 7 Trap Night 2

Date, time traps set [illegible] Date, time traps checked [illegible]

I[illegible] toe clip # used on previous day 0043 Field Analyst(s) McGregor

Project 83 QA Check bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-12	PEMA	0305	F	A	22	I	
A-5	PEMA	0043	F	A	[illegible]	A	
A-2	PEMA	0010	M	A	20	A	
C-7	PEMA	0042	M	A	15	A	swollen [illegible]
C-12	PEMA	[illegible]	M	A	20	A	"

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Upland Meadow Grid 7 Sample Period 2 Trap Night 3

Date, time traps set 17 May 1976 [illegible] Date, time traps checked 18 May 1976 (15:15)

Last toe clip # used on previous day [illegible] Field Analyst(s) Kenzo / Martin

Project 83 QA Check bun 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
D-4	PEMA	0045	F	A	20	U	
C-7	PEMA	0051	F	A	20	U	
D-13	PEMA	0150	F	A	U	I	
A-10	PEMA	0220	M	A	19	A	
A-8	PEMA	0230	F	A	22	I	
B-5	PEMA	0143	F	A	U	I	
A-5	PEMA	0240	M	A	18	A	
B-4	PEMA	0403	M	A	21	A	

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*Key taxonomic characters, physical condition of animal, etc.

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File No:

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 7 Sample Period 7 Trap Night 4

Date, time traps set [illegible] Date, time traps checked 19 May 1976 [illegible]

Last toe clip # used on previous day 0240 Field Analyst(s) [illegible]

Project [illegible] 0051 QA Check bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
[illegible]	PEMA	0047	F	A	U	I	–
C-7	PEMA	0042	M	A	U	I	–
C-11	[illegible]	[illegible]	F	J	M	[illegible]	–
C-12	PEMA	0210	M	A	U	A	–

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 7 Sample Period 7 Trap Night 5

Date, time traps set [illegible] ([illegible]) Date, time traps checked 20 [illegible] ([illegible])

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project 83 QA Check brm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-10	PEMA	0002	F	[illegible]	22	A	
A-6	PEMA	0043	M	[illegible]	4	A	
B-5	PEMA	0053	F	[illegible]	16	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Greasewood Sage Grid A Sample Period 7 Trap Night 1

Date, time traps set 5/15/76 0800 Date, time traps checked 5/16/76 0800

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project 83 QA Check JT [illegible] 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-1	EUMI	2155N	m	A	28	D	
B-1	PEMA	2211N	F	A	20	A	
F-1	PEMA	0241	F	A	26	I	Clipped
J-1	PEMA	0454	M	A	24	I	Clippro
L-1	EUMI	1000	F	A	48	A	''
L-3	PEMA	2212N	F	A	34	A	'
F-3	EUMI	0325	M	A	30	I	'' Slipping from [illegible]
D-8	PEMA	1424	F	A	22	A	
J-9	PEMA	2213N	m	J	10	I	
M-11	PEMA	2214N	m	A	18	I	
L-11	PEMA	2215N	M	J	12	I	
H-11	PEMA	1322	M	A	19	A	
F-11	EUMI	0204	M	A	32	U	
C-11	PEMA	2221N	M	A	21	I	
B-11	PEMA	2222N	M	A	23	A	
C-12	EUMI	1224	F	A	31	I	
D-12	PEMA	2223N	M	J	12	I	
H-12	PEMA	2224N	M	J	12	I	
L-12	EUMI	1223	F	A	32	A	

*Key taxonomic characters, physical condition of animal, etc.

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Grid Name [illegible] Grid A Sample Period 2 Trap Night 1

Date, time traps set 5/17/76 0800 Date, time traps checked 5/18/76 0800

ast ~~toe~~ clip # used on previous day 1441/2134/2254 Field Analyst(s) [illegible]

Project [illegible] QA Check TT bm

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
[illegible]	PEMA	1442 N	M	A	21	I	
-2	PEMA	1443 N	F	A	20	A	lactating
-2	[illegible]	1444 N	M	A	19	A	swollen testes
-2	EUMI	0243	F	A	34	I	suffering from exposure
-2	PEMA	1445 N	M	A	20	I	
1-2	EUMI	0220	M	A	31	I	
-4	PEMA	1451 N	M	A	19	I	
-3	EUMI	0223	M	A	33	A	swollen testes or 04~~1~~23
-3	EUMI	0040	M	A	—	D	(first caught Oct. 74)
-6	PEMA	1115	F	A	22	A	lactating
-6	PEMA	1452 N	M	A	21	A	swollen testes
I-5	EUMI	0441	F	A	46	U	healthy!
L-4	EUMI	1122	M	A	36	I	
M-4	PEMA	1453 N	M	A	20	J	
M-6	PEMA	2135 N	M	A	19	J	
M-8	PEMA	2141 N	M	A	19	I	
K-6	EUMI	1241	M	A	34	I	
L-10	PEMA	2255 N	M	A	18	I	
F-10	PEMA	2311 N	M	A	20	I	
D-10	PEMA	2312 N	F	J	11	I	
D-13	PEMA	2313 N	F	A	—	D	saved for repro anal.
F-13	PEMA	0213	M	A	20	J	
M-13	PEMA	2314 N	M	A	18	A	enlarged testes
-12	EUMI	2315 N	M	A	34	J	

~~RECOP PROGRESS REPORT~~

* Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid A Sample Period 7 Trap Night 2

Date, time traps set 5/15/76 (0800) Date, time traps checked [illegible]

Last toe clip # used on previous day ——— Field Analyst(s) Sang

Project 82 QA Check [illegible] 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-1	EUMI	1404	M	A	33	I	Suckling from exp
C-1	EUMI	2301	M	A	36	A	[illegible]
D-1	PEMA	1433	F	A	u	I	lost her tail
F-1	PEMA	2123	[illegible]	A	u	I	
H-1	EUMI	0242	F	A	35	I	
J-1	PEMA	2302	F	A	22	A	lactating
K-1	EUMI	2220	M	A	31	I	
L-1	PEMA	2303	F	A	22	A	swollen red vulva
L-2	EUMI	1000	F	A	47	A	pregnant
J-2	PEMA	2304	M	A	19	I	
H-2	PEMA	0241	F	A	18	I	suckling from exp.
C-2	PEAP	2321	M	A	8	D	
B-[illegible]	PEMA	1442	M	A	u	I	
A-2	EUMI	0223	M	A	u	D	[illegible] clipped 2(2,4) 23
A-3	EUMI	2131	M	A	38	I	
C-3	PEMA	2305	M	A	16	I	
K-3	PEMA	2212	F	A	u	A	pregnant
E-4	PEMA	1451	M	A	u	I	
D-4	PEMA	1115	F	A	U	D	
C-6	PEMA	1452	M	A	u	I	
H-5	PEMA	2401	M	A	17	I	
M-4	PEMA	2402	F	A	20	I	
M-6	EUMI	1221	M	A	33	I	
M-8	PEMA	2125	M	A	u	I	
I-5	EUMI	0441	F	A	u	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible]/Sage Grid A Sample Period 7 Trap Night 2

Date, time traps set 5/16/76 0800 Date, time traps checked 5/17/76 0800

Last toe clip # used on previous day —— Field Analyst(s) Clark

Project 83 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-13	PEMA	2011	m	A	22	A	desc. testes
B-13	PEMA	2222	m	A	u	A	" "
D-13	EUMI	1234	m	A	24	u	
F-13	PEMA	0213	m	A	18	A	desc. testes
K-13	EUMI	1223	F	A	38	A	lact.
J-12	PEMA	1425	F	A	20	A	preg.
F-12	EUMI	0204	F	A	35	A	swollen vulva
D-12	PEMA	1221	F	A	26	A	about to give birth
C-12	PEMA	2223	m	J	u	D	
L-10	PEMA	2214	m	J	u	I	
I-10	PEMA	2221	m	A	u	I	
A-9	PEMA	2255	m	J	u	I	Suffering from exposure
D-10	PEMA	2312	F	J	u	I	" "
B-8	EUMI	0425	m	A	29	u	
D-7	PEMA	1424	F	A	18	A	lact
J-8	PEMA	2213	m	J	u	I	
J-7	PEMA	1453	m	A	23	A	desc. testes

Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid A Sample Period 7 Trap Night 3

Date, time traps set 5/17/76 0800 Date, time traps checked 5/18/76 0800

~~Last~~ toe clip # used on previous day 2011/2402 Field Analyst(s) [illegible]

Project 83 QA Check bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-1	PEMA	2322	M	A	19	I	
F-1	PEMA	2124	F	A	U	I	
H-1	PEMA	2211	F	A	U	A	[illegible]
J-1	PEMA	0241	F	A	20	I	
K-1	PEMA	[illegible]	M	A	21	A	
L-2	PEMA	2403	F	A	U	A	
J-2	PEMA	1445	M	A	U	D	
B-2	PEMA	1444	M	A	U	I	
C-3	EUMI	2404	M	A	31	I	
H-3	MILO	2405	U	A	26	I	
G-5	PEMA	2110	M	A	19	I	
E-5	PEMA	1451	M	A	U	I	
[illegible]5	PEMA	2120	M	A	20	A	
C-4	EUMI	1052	M	A	24	A	
A-4	EUMI	2123	M	A	21	I	
C-6	EUMI	2130	M	A	22	I	
D-6	PEMA	2140	F	A	18	I	
G-6	PEMA	2150	F	A	20	A	
J-4	EUMI	1122	M	A	U	I	
L-4	PEMA	2402	F	A	U	A	swollen vulva
M-4	EUMI	2210	M	A	24	I	
M-6	PEMA	2135	M	A	U	I	
F-7	PEMA	1423	[illegible]	A	25	A	[illegible]
H-7	PEMA	2220	M	A	17	A	

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*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Greasewood - sage Grid A Sample Period 7 Trap Night 3

Date, time traps set 5/17/76 0800 Date, time traps checked 5/18/76 0800

Last toe clip # used on previous day 2011/2402 Field Analyst(s) McGrady

Project 83 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
B-12	PEMA	2222	M	A	-u	A	
D-13	FUMI	2231	M	A	36	I	
F-13	PEMA	2012	M	A	-u	D	
H-13	PEMA	2013	F	A	16	A	
J-12	PEMA	1425	F	A	20	I	
F-12	PEMA	0213	M	A	20	A	
C-11	SPLA	0154	M	A	170	A	SICKLY
H-11	PEMA	1322	M	A	16	A	SICK
J-11	FUMI	2014	F	A	40	I	
K-10	FUMI	1223	F	A	36	I	
C-10	PEMA	2221	M	A	-u	D	
D-9	PEMA	2015	M	A	16	A	
G-9	PEMA	2254	M	A	u	A	
I-9	PEMA	2311	M	A	-u	A	
H-8	EUMI	1234	M	A	34	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid A Sample Period 7 Trap Night 4

Date, time traps set 5/18/76 [illegible] Date, time traps checked 5/[illegible]/76 [illegible]

Last toe clip # used on previous day 2015 / 2210 Field Analyst(s) [illegible]

Project 63 QA Check 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-1	EUMI	1404	M	A	U	I	
H-1	PEMA	2302	F	A	U	A	
L-1	PEMA	0404	M	A	U	D	
M-2	PEMA	2303	F	A	U	A	
L-2	EUMI	0220	M	A	U	I	
C-2	PEMA	1444	M	A	U	I	
B-2	PEMA	1442	M	A	U	I	
B-3	EUMI	1053	M	A	33	I	suffering from exp.
D-3	PEMA	2211	F	A	U	I	
K-3	EUMI	1000	F	A	48	A	[illegible]
M-3	PEMA	2212	F	A	U	A	
L-3	EUMI	4122	M	A	U	D	this was the no.
[illegible]	PEMA	2230	M	A	U	I	
I-4	EUMI	0441	F	A	U	I	
F-5	EUMI	2123	M	A	U	I	
E-4	EUMI	0243	F	A	U	I	
E-5	PEMA	1451	M	A	U	D	
A-6	EUMI	1052	M	A	U	A	
D-6	PEMA	2140	F	A	U	I	suffering from exp.
E-6	PEMA	2120	M	A	U	A	
F-6	PEMA	1452	M	A	U	I	
G-6	PEMA	2401	M	A	U	I	
H-5	EUMI	2240	M	A	33	I	
C-8	PEMA	2250	M	J	15	I	

*Key taxonomic characters, physical condition of animal, etc.

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Grid Name Greasewood Grid A Sample Period 7 Trap Night 4

Date, time traps set 5/18/76 [illegible] Date, time traps checked 5/19/76 0500

Last toe clip # used on previous day 2021, 2320 Field Analyst(s) L. Martin

Project 83 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
D-13	PEMA	0213	m	A	u	I	
E-13	EUMI	2204	m	A	34	I	
K-13	PEMA	1025	F	A	u	I	
B-12	PEMA	2011	m	A	u	I	
B-11	PEMA	2222	m	A	u	D	
C-11	EUMI	1234	m	A	u	I	
F-11	PEMA	1322	m	A	u	I	
H-11	PEMA	2224	m	A	u	I	
H-11	PEMA	2012	F	J	u	I	
J-11	PEMA	2312	F	J	u	I	
-11	EUMI	1235	m	A	34	I	
M-10	PEMA	2125	m	A	u	I	
N-9	PEMA	2021	F	A	u	A	pregnant
J-8	PEMA	2311	m	A	u	I	
I-8	PEMA	2220	m	A	u	A	
H-8	PEMA	2255	m	A	u	u	
H-7	PEMA	2022	F	A	16	I	
F-8	PEMA	1424	F	A	16	A	pregnant
D-8	PEMA	2213	m	A	u	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid A Sample Period 7 Trap Night 5

Date, time traps set 5/19/76 0800 Date, time traps checked 5/20/76 [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project 83 QA Check [illegible] 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
C-1	EUMI	1355	F	A	21	D	[illegible]
F-1	PEMA	2402	F	A	U	I	" " "
M-2	PEMA	2303	F	A	U	A	
L-2	EUMI	1000	F	A	U	A	
H-2	PEMA	2211	F	A	U	D	[illegible]
F-2	PEMA	0241	F	A	U	I	
L-3	PEMA	2212	F	A	U	D	
M-3	PEMA	2310	M	A	19	A	
K-4	EUMI	2210	M	A	U	I	
H-4	PEMA	2320	M	J	15	J	
G-4	PEMA	2401	M	A	U	I	
E-5	PEMA	1424	F	A	U	D	
[illegible]	PEMA	[illegible]	F			I	[illegible]
D-4	EUMI	2330		A	26	A	" " "
A-4	PEMA	2340	F	A	17	I	
E-6	PEMA	1452	M	A	[illegible]	I	[illegible]
F-6	PEMA	2402	F	A	U	I	
H-5	PEMA	1453	M	A	U	I	[illegible]
J-4	PEMA	2140	F	A	U	I	" " "
J-6	EUMI	1241	M	A	U	I	
I5	PEMA	2305	M	A	U	A	

*Key taxonomic characters, physical condition of animal, etc.

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Sheet 2 of 2

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Sage Grid A Sample Period 7 Trap Night 5

Date, time traps set 5/19/96 [illegible] Date, time traps checked 5/20/96 0800

Last toe clip # used on previous day 2222-2250 Field Analyst(s) [illegible]

Project 33 QA Check

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-13	EUMI	0204	m	A	[illegible]	I	
D-13	PEMA	0213	m		20	I	
F-13	EUMI	1234	[illegible]		U	I	
L-13	PEMA	1425	F	A		D	
[illegible]	PEMA	[illegible]	M	J	10	I	
J-12	PEMA	1322	m	A	16	I	
F-12	EUMI	2120	m	A	U	I	
B-12	PEMA	2250	F	J	U	I	
J-11	PEMA	2113	[illegible]	A	U	D	
M-11	PEMA	[illegible]	M	A	U	A	Swollen testes
J-9	PEMA	[illegible]	m	J	U	I	
I-9	PEMA	2021	m	J	14	I	
H-9	PEMA	2223	m	A	U	I	
F-9	PEMA	2312	F	J	U	I	
D-8	PEMA	2213	m	A	U	I	
G-8	PEMA	1221	F	A	26	A	lact.
H-8	PEMA	2255	m	A	U	D	
I-8	PEMA	2311	m	A	U	D	
J-7	EUMI	1255	F	A	44	A	lact.

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name South PJ Grid B Sample Period 7 Trap Night 1

Date, time traps set 5/15/76 0900 Date, time traps checked 5/16/76 0900

Last toe clip # used on previous day 0415 Field Analyst(s) L. Martin

Project 83 QA Check 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
M-1	EUGA	0421	F	A	31	I	
M-2	SPLA	1051	F	A	207	A	pregnant
L-3	EUGA	0422	M	A	44	D	dead
L-6	EUMI	0042	F	A	39	A	pregnant
L-13	EUMI	1325	F	A	39	I	
K-13	EUMI	0032	F	A	45	A	pregnant
K-4	EUGA	0423	F	A	49	A	lactating?
H-5	EUGA	0424	M	A	53	I	
G-9	EUMI	3040	M	A	31	I	
H-11	PEMA	0425	F	A	14	I	
D-10	EUGA	0100	F	A	47	A	pregnant
D-9	EUGA	0431	M	A	47	I	
D[illegible]	EUMI	0404	M	A	34	I	
A-3	PEMA	0432	M	A	17	A	
A-6	PEAP	0200	F	A	10	U	
A-8	PEMA	0433	M	A	22	I	
A-12	EUMI	0252	F	A	39	A	
A-13	EUMI	3000	M	A	34	I	

*Key taxonomic characters, physical condition of animal, etc.

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Grid Name South P-J Grid B Sample Period 7 Trap Night 1

Date, time traps set 5/15/76 0930 Date, time traps checked 5/16/76 0930

Last toe clip # used on previous day 1125 Field Analyst(s) Turner

Project 83 QA Check lum

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
[illegible]-2	PEMA	0344	F	A	21	A	
[illegible]-8	EUQU	[illegible]	M	A	u	D	Torpid
M-10	EUQU	1131	M	A	5[illegible]	I	
M-11	PEMA	1132	M	J	12	I	
M-12	[illegible]	1133	F	A	200	A	
L-13	EUMI	0104	[illegible]	[illegible]	31	I	
J-3	EUMI	[illegible]	F	A	44	A	
I-6	PETR	1134	F	J	u	D	
I-10	EUMI	0043	M	A	23	I	
J-12	EUQU	1135	♀	A	u	D	
E-7	EUMI	0402	F	A	42	A	Pregnant
F-7	EUQU	1115	F	A	46	A	
[illegible]	PEMA	1141	F	A	13	A	
E-6	PEMA	1142	M	A	22	I	
C-3	PEMA	1143	M	J	15	I	
C-12	PEMA	0315	F	A	21	A	
B-13	PEMA	1355	M	A	19	I	
B-12	PEMA	1144	M	J	13	I	} Same trap
B-12	PEMA	1145	♂	A	16	I	
B-11	PEMA	0334	♂	A	21	I	

* Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P.J. South Grid B Sample Period 7 Trap Night 2

Date, time traps set 5/16/76 0900 Date, time traps checked 5/17/76 0820

L[illegible] toe clip # used on previous day 0433 Field Analyst(s) L. Martin

Project 83 QA Check ~~[illegible]~~ 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-1	PEMA	0434	F	A	20	A	pregnant
C-1	EUSA	0204	F	A	43	A	pregnant
L-3	PETR	0324	M	A	21	U	
L-12	EUGA	2011	M	A	39	I	
I-10	PEMA	2012	M	A	16	I	
J-4	PETR	2013	F	A	26	A	pregnant
D-11	PEMA	0334	M	A	21	I	
D-13	EUMI	0123	M	A	36	I	
C-13	PEMA	1305	M	A	19	I	
C-12	PEMA	1145	M	A	17	I	
C-8	PEAP	0432	F	A	11	U	
C-6	EUMI	3005	M	A	35	I	
C-3	EUMI	0002	M	A	35	I	

*Key taxonomic characters, physical condition of animal, etc.

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[illegible] PROGRESS REPORT

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Grid Name South P-J Grid B Sample Period 7 Trap Night 2

Date, time traps set 0930 5/16/76 Date, time traps checked 0830 5/17/76

Last toe clip # used on previous day 1145 Field Analyst(s) Turner

Project 83 QA Check JT

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-2	PEMA	0344	F	A	u	A	
F-2	EUMI	0224	F	A	u	A	
M-1	EUQU	0103	F	A	39	A	
M-10	EUQU	1151	M	A	43	I	
M-11	PEMA	1152	F	A	16	A	
K-13	SPLA	4050	F	A	205	A	
K-11	SPLA	1153	M	A	208	A	
K-8	SPLA	0133	M	A	204	I	
K-6	SPLA	1154	F	A	190	A	
H-3	PEMA	1155	M	A	19	I	
H-11	PEMA	1211	M	J	12	I	
F-12	PEMA	1212	F	J	12	I	
F-7	PEMA	1142	M	A	u	D	
F-6	EUMI	0043	M	A	u	I	
E-2	PEMA	2011	M	A	18	A	
E-5	EUMI	0100	F	A	40	A	
B-6	EUMI	0402	F	A	u	A	
B-12	PEMA	1144	M	A	u	I	
B-13	EUMI	0314	M	A	30	I	
A-13	EUMI	0313	M	A	29	I	
A-12	PEMA	0315	F	A	u	A	
A-8	PEMA	1412	F	A	20	A	
A-4	EUMI	0251	M	A	33	I	

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*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name South P-J Grid B Sample Period 7 Trap Night 3

Date, time traps set 0900 5/17/76 Date, time traps checked 5/20/76, 1200

Last toe clip # used on previous day 1212 Field Analyst(s) Turner

Project 33 QA Check [illegible] 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-2	PEMA	1213	F	A	21	A	
L-8	PEMA	1214	F	A	18	A	
J-10	PEMA	1215	M	J	14	J	
I-8	EUQU	1221	F	A	51	A	
J-6	PEMA	0332	F	A	u	U	
J-5	SPLA	1222	M	A	208	A	
F-7	PEMA	0334	M	A	u	A	
E-8	EUMI	0352	F	A	48	A	
F-10	EUMI	0402	F	A	u	A	
C-8	EUMI	1223	M	A	30	A	
A-4	PEMA	0433	M	A	u	A	
A-6	PEMA	1412	F	A	u	A	
A-10	EUMI	0042	F	A	u	A	

*Key taxonomic characters, physical condition of animal, etc.

RECSP PROGRESS REPORT

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Sheet 2 of [illegible]

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] 5 Grid B Sample Period 7 Trap Night 3

Date, time traps set 5/14/76 0900 Date, time traps checked 5/15/76 0900

Last toe clip # used on previous day 2012 Field Analyst(s)

Project 83 QA Check

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
[illegible]-1	PEMA	0344	F	A	U	A	swollen red vulva
H-1	EUMI	2014	M	A	30	I	
M-1	PEMA	2015	M	J	14	I	
M-12	SPLA	4050	F	A	194	A	lact.
D-13	EUMI	0043	M	A	U	U	
D-12	EUMI	0123	M	A	U	U	
D-11	PEMA	0215	F	A	U	A	preg.
D-7	EUMI	0404	M	A	U	U	
D-6	PEMA	1143	M	A	16	I	
D-5	PEMA	2011	M	A	20	A	desc. testes - Hairless on back toward

*Key taxonomic characters, physical condition of animal, etc.

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[illegible] SP PROGRESS REPORT

Sheet 1 of 2

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] B-5 Grid B Sample Period 7 Trap Night 4

Date, time traps set 0400 5/18/76 Date, time traps checked 5/19/76 0830

Last toe clip # used on previous day 1223 Field Analyst(s) Turner

Project B3 QA Check Lym 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
H-1	PeMA	1224	F	A	15	I	
L-1	EuMI	4001	M	A	33	I	
M-6	PeMA	1214	F	A	u	A	
M-8	SpLA	1225	F	A	u	A	
M-10	SpLA	4050	F	A	u	I	
K-11	PeMA	1301	M	A	18	I	
H-8	PeMA	2012	M	A	u	A	
F-12	EuQU	2301	M	A	41	I	
F-13	EuMI	3020	M	A	33	A	
D-7	EuMI	3040	M	A	u	I	
B-10	PeMA	0315	F	A	u	A	
B-12	EuMI	0313	M	A	u	A	
A-8	PeMA	0433	M	A	u	A	
A-6	EuMI	0251	M	A	u	A	

*Key taxonomic characters, physical condition of animal, etc.

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File No:

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name PJ SOUTH Grid B Sample Period 7 Trap Night 4

Date, time traps set 5/18/76 0900 Date, time traps checked 5/19/76 0800

Last toe clip # used on previous day 2015 Field Analyst(s) McGregor

Project 83 QA Check

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-2	PEMA	1123	M	A	20	A	
L-8	SPLA	2021	F	A	184	A	LACT.
L-11	EUMI	0032	F	A	38	A	LACT.
J-11	PEMA	1211	M	A	16	A	
J-10	PETR	2022	F	A	22	A	
I-6	PETR	2023	F	A	16	A	
E-6	PEMA	2024	M	A	12	A	
C-8	PEMA	0334	M	A	22	A	
C-6	EUMI	0100	F	A	44	A	Preg. LACT.

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P.I. South Grid B Sample Period 7 Trap Night 5

Date, time traps set 5/19/76 0815 Date, time traps checked 5/20/76 0815

Last toe clip # used on previous day 2023 Field Analyst(s) L. Martin

Project 83 QA Check bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
L-6	PETR	0324	m	A	32	I	
L-8	EUMI	1151	m	A	44	I	
L-12	SPLA	2024	F	J	66	I	
K-11	EUMI	1115	F	A	U	A	
H-6	PETR	2013	F	A	U	U	
G-6	PEAP	0322	F	A	10	I	
H-8	PEMA	2025	F	J	12	I	
G-9	EUMI	2031	m	J	16	I	
H-12	PEMA	1301	m	A	U	I	
C-12	PEMA	1145	m	J	U	I	
A-3	PEMA	0433	m	A	U	I	
A-8	PEMA	1402	F	A	18	U	
A-10	EUMI	0452	U	A	U	U	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Small P. S Grid B Sample Period 7 Trap Night 5

Date, time traps set 0815 5/19/76 Date, time traps checked 0815 5/20/76

Last toe clip # used on previous day 2301 Field Analyst(s) Turn

Project 33 QA Check brm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
M-2	SPLA	0131	M	A	u	I	
M-6	EUQU	0313	M	A	u	I	
M-12	PEMA	2302	F	A	u	I	
J-13	PEMA	1211	M	J	u	I	
J-12	SPLA	2303	F	A	130	A	
J-8	SPLA	0133	M	A	u	I	
I-6	PETR	2304	F	J	12	I	
F-4	EUQU	0100	F	A	u	A	
E-6	PEMA	2042	M	J	u	D	USED FOR HAUHHART PAIR
F-8	EUQU	0252	F	A	u	A	
F-11	EUMI	0123	F	A	u	A	
F-12	PEMA	0334	M	A	u	I	
D-11	PEMA	2305	M	J	13	I	
D-8	EUMI	1223	M	A	u	I	
D-7	PEMA	1143	M	A	u	I	
D-3	PEMA	0344	F	A	u	A	
B-11	PEMA	0315	F	A	u	A	
B-12	PEMA	1144	M	J	u	I	
B-13	EUMI	2401	M	A	u	I	~~big [illegible]~~ TRAP D
A-13	EUMI	3020	M	A	u	I	

* Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name North P.J. Grid C Sample Period 7 Trap Night 1

Date, time traps set 5/15/76 1400 Date, time traps checked 5/16/76 1400

Last toe clip # used on previous day 0242/1211 Field Analyst(s) Sam

Project 83 QA Check TT [illegible] 5-26 76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
A-2	EUMI	1121	M	A	26	A	swollen testes
B-2	PEMA	1212 N	M	A	22	I	
K-2	PEMA	1012	M	A	—	D	caught by foot [illegible]
M-2	PEMA	2132	M	A	20	A	
L-1	PEMA	1213 N	M	A	20	I	
L-3	PEMA	1214 N	F	A	21	A	lactating
L-6	PEMA	1221 N	F	A	20	A	lactating
K-4	SPLA	3004	F	A	192	A	lactating
I-4	PEMA	1222 N	M	A	21	I	
J-7	PEMA	1223 N	M	A	—	D	
J-11	EUMI	1224 N	M	A	34	A	swollen testes
F-13	PEMA	1225 N	F	A	22	A	
F-4	SPLA	1023	F	A	100	I	
E-[illegible]	EUMI	1231 N	M	A	26	I	
C-4	EUQU	1232 N	F	A	54	I	
A-10	SPLA	0144	M	A	195	I	
A-8	PEMA	0232	F	A	25	A	pregnant

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid C Sample Period 7 Trap Night 1

Date, time traps set [illegible]/76 14:00 Date, time traps checked 5/16/76 1400

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project 83 QA Check SS

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
B-1	PEMA	0344N	F	A	26	A	Lactating
C-1	SUMI	4100	M	A	34	I	
D-1	SUMI	3002	M	A	34	I	
~~H-2~~	~~PEMA~~						Escaped
Y-1	PEMA	0345N	F	A	22	A	lact.
M-3	PEMA	0351N	F	A	22	A	[illegible]
M-4	PEMA	0352N	F	A	29	A	preg
M-13	PEMA	0353N	F	A	19	I	
H-12	SUMA	0333	F	A	40	A	lact.
D-3	SPLA	1015	F	A	96	A	lact. incredibly
D-10	PEMA	0354N	F	A-Ⓘ	13	I	
B-13	PEMA	0355N	M.	A	22	A	descended testes
A-3	PEMA	0411N	M	J	15	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name N. P.J. Grid C Sample Period 7 Trap Night 2

Date, time traps set 5/16/76 1900 Date, time traps checked 5/17/76 1900

~~Last toe-clip~~ # used on previous day 0111-1232 Field Analyst(s) Sam

Pr[illegible]ct 83 QA Check 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
C-1	PEMA	1233	M	A	20	I	
O-1	PEMA	1234	M	A	18	I	
F-1	PEMA	1235	F	A	21	A	Lactating
K-1	PEMA	0345	F	A	—u	A	Lactating
L-1	PEMA	1241	F	A	19	I	
M-1	PEMA	1242	F	A	24	A	pregnant
M-3	PEMA	1214	F	A	—u	A	lactating
M-12	EUQU	2111	F	A	57	I	
L-2	EUMI	1243	F	A	44	A	pregnant
K-2	PEMA	1244	F	A	U	D	Died for [illegible]
K-3	PEMA	1245	M	A	20	A	swollen testes
K-8	PEMA	1251	M.	A	19	I	
K-12	PEMA	1252	M	J	11	I	
G-[illegible]	EUMI	1121	M	A	33	I	
						/	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name N. P.J Grid C Sample Period 7 Trap Night 2
Date, time traps set 5/16/76 1400 Date, time traps checked 5/17/76 1400
Last toe clip # used on previous day 0411 - 1232 Field Analyst(s) Clark
Project 83 QA Check brm

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-1	EUMI	1003	F	A	40	A	preg.
A-2	EUMI	0412	M	A	29	I	
-6	SPLA	1202	M	A	u	D	moved cage into sun
-12	PEAP	2154	F	A	8	I	orange egg-like patches around V
-10	PEMA	0413	M	A	20	A	swollen testes
B-3	EUQA	0414	M	A	54	I	
-2	PEMA	0415	F	J	9	I	
C-13	PEMA	0421	M	J	16	I	
D-10	PEMA	0354	F	J	~~[illegible]~~ u	I	orange eggs
D-8	PEMA *	1421	F	A	18	A	preg
F-7	SPLA	1023	F	A	u	D	
F-2	SPLA	1015	F	A	192	A	Lact.

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] (N) Grid C Sample Period 7 Trap Night 3
Date, time traps set 5/17/76 1400 Date, time traps checked 5/18/76 (1400)
~~Last toe~~ clip # used on previous day ——— Field Analyst(s) Sary
Project 8.3 QA Check bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
C-1	PEMA	1212	M	A	U	I	
D-1	PEMA	0344	F	A	U	I	
F-1	PEMA	2301	M	J	13	I	
K-1	PEMA	0345	F	A	U	D	saved for repro
M-1	PEMA	2302	M	A	20	A	
M-3	PEMA	2303	F	A	19	I	
M-4	PEMA	0352	F	A	U	A	
M-6	EUMI	2304	M	A	32	I	
M-13	EUQU	1253	M	A	U	D	Saved for voucher specimen
L-8	EUMI	4100	M	A	33	T	
L-6	EUMI	1032	F	A	36	A	
L-4	PEMA	0050	M	A	19	I	Could be natural clip.
L[illegible]	PEMA	2305	F	A	23	A	
K-3	PEMA	2401	M	J	15	J	
J-15	PEMA	2402	M	J	14	T	
I-7	EUQU	2403	F	A	60	A	[illegible]
H-3	PEMA	2404	F	A	20	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P-J North Grid C Sample Period 7 Trap Night 3

Date, time traps set 5/17/76 1430 Date, time traps checked 5/19/76 1400

Last toe clip # used on previous day —— Field Analyst(s) McGregor

Project 83 QA Check lum

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
A-1	PEMA	2011	F	A	14	I	
A-3	PEMA	0111	M	A	14	A	
B-13	PEAP	2012	F	A	8	U	
B-12	SPLA	1405	M	A	186	A	
B-11	PEMA	2013	M	A	10	A	SICK
-2	PEMA	0415	F	J	10	I	
-10	PEMA	0355	M	A	22	A	
C-10	PEMA	0354	F	J	12	I	
D-8	PEMA	1222	M	A	18	A	
E-7	PEMA	2014	F	A	18	A	LACT
E-10	PEMA	2015	F	A	18	A	LACT

* Key taxonomic characters, physical condition of animal, etc.

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Sheet 1 of 2

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid C Sample Period 7 Trap Night 4

Date, time traps set 5|18|76 1400 Date, time traps checked 5|19|76 1400

Last toe clip # used on previous day 2015/2404 Field Analyst(s) Sanz

Project ______ QA Check bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
D-1	PEMA	0344	F	A	U	I	
M-1	PEMA	2302	M	A	U	D	
M-2	PEMA	1214	F	A	U	I	
M-3	PEMA	2122	M	A	U	I	
M-4	SPLA	2405	M	A	187	I	
L-8	EUQU	2110	M	A	52	I	
L-2	PEMA	2120	M	J	12	I	
K-2	PEMA	2130	F	J	14	I	
K-2	PEMA	2140	M	J	15	I	
K-3	PEMA	2150	F	J	12	I	
K-6	PEMA	1221	F	A	U	I	
K-8	EUMI	2210	M	A	36	I	
[illegible]	SPLA	2220	F	A	212	A	
J-3	PEMA	2230	M	A	19	A	
H-3	PEMA	2240	F	A	18	A	6 babies in trap

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name P.J. North Grid C Sample Period 7 Trap Night 4

Date, time traps set 5/18/76 1400 Date, time traps checked 5/19/76 1400

Last toe clip # used on previous day 2145, 2404 Field Analyst(s) L. Martin

Project C3 QA Check

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
4-11	PEMA	0201	m	A	14	I	
-12	PEMA	0232	F	A	20	U	
1-2	PEMA	2021	F	A	26	A	pregnant
E-5	EUMI	1121	m	A	31	I	
E-4	PEMA	2022	F	A	22	D	
-13	PEMA	1225	F	A	u	U	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] (II) Grid C Sample Period 7 Trap Night 5

Date, time traps set 5/2[illegible]/7[illegible] 1400 Date, time traps checked 5/[illegible]

~~Last~~ toe clip # used on previous day [illegible] Field Analyst(s) Sam

Project C3 QA Check bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
M-2	PEMA	2303	F	A	U	I	
M-3	PEMA	1214	F	A	U	I	
M-6	PEMA	0352	[illegible]	A	U	A	giving birth
M-8	PEMA	2023	F	J	13	I	
L-8	PEMA	2140	M	U	U	I	
L-6	PEMA	2024	M	A	19	I	
L-4	PEMA	0050	M	A	U	I	tailless
L-2	PEMA	1245	M	A	U	I	
K-10	PEMA	2130	F	U	U	I	
J-13	PEMA	2025	F	A	22	A	
H-4	PEMA	1222	M	A	U	I	
H-13	PEMA	2031	F	A	26	A	preg

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name N. P-5 Grid C Sample Period 7 Trap Night 5

Date, time traps set [illegible] 1400 Date, time traps checked 5/20/[illegible] 1400

Last toe clip # used on previous day Field Analyst(s) Clar[illegible]

Project [illegible] QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
[illegible]	PEMA	[illegible]134	F	A	23	A	[illegible]
E-10	[illegible]A	2612	m	–	U	I	
E-1	PEMA	0023	m	J	12	I	
C-8	PEMA	0[illegible]	[illegible]	A	U	I	
[illegible]	PEMA	01[illegible]	[illegible]	A	41	A	Lact.
[illegible]	PEMA	0522	m	A	32	I	
[illegible]	PEMA	3355	m	A	U	A	[illegible]
[illegible]	[illegible]A	0144	m	A	205	I	
E-9	[illegible]	1251	m	A	U	I	
D-5	[illegible]A	0[illegible]	F	A	U	A	Lact
D-7	[illegible]A?	2012	F	[illegible]	U	II	
C-5	PEMA	0424	[illegible]	J	12	I	
D-4	PEMA	0[illegible]	F	A	28	I	
D-3	[illegible]	04[illegible]	[illegible]	J	10	I	
D-2	PEMA	0235	[illegible]	A	30	I	
D-1	PEMA	0344	F	A	U	D	
[illegible]-12	PEMA	1225	F	A	U	A	Lact.

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name SAGEBRUSH Grid D Sample Period 7 Trap Night 7

Date, time traps set 1500 5/15/76 Date, time traps checked 5/16/76 1500

Last toe clip # used on previous day 0331 Field Analyst(s) Turner

Project 83 QA Check bmw 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
L-10	PEMA	0332	M	J	12	I	
L-11	EUMI	1305	F	A	33	A	
L-12	PEMA	0333	M	A	16	I	
J-12	EUMI	100[illegible]	M	A	35	A	
J-9	PEMA	0334	M	A	18	A	
J-6	SPLA	0335	M	A	202	I	
I-5	PEMA	0342	M	A	20	I	
J-4	PEMA	0343	M	A	16	I	
J-1	EUMI	0344	F	A	42	A	
F-1	PEMA	0345	M	A	14	I	
F-2	PEMA	0351	F	A	14	A	
F-4	EUMI	0352	F	A	40	A	
E[illegible]	PEMA	0353	M	J	12	I	
E-8	EUMI	3000	M	A	32	A	
F-11	PEMA	0354	F	A	16	A	
F-13	PEMA	0355	M	A	17	A	
D-8	PEMA	0411	M	A	21	A	
D-2	PEMA	0412	M	A	13	I	
D-1	SPLA	0413	F	A	250	A	
B-6	SPLA	0414	M	A	4	I	
B-10	EUMI	0030	M	A	33	I	
B-11	PEMA	0415	F	A	20	A	
B-12	PEMA	0122	M	A	20	A	
A-10	SPLA	0421	F	J	104	I	
A-4	~~EUMI~~	0422	U	A	33	U	ESCAPED

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*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Sagebrush Grid D Sample Period 7 Trap Night 1

Date, time traps set 5/15/76 1500 Date, time traps checked 5/16/76 1500

Last toe clip # used on previous day 0132 Field Analyst(s) L. Martin

Project 83 QA Check bum

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
M-4	PEMA	0001	F	A	15	U	
M-6	EUMI	0133	M	A	32	I	
M-11	EUMI	0323	F	A	38	A	lactating
M-12	PEMA	0134	M	A	21	I	
G-5	PEMA	0135	F	A	22	A	pregnant
H-8	PEMA	0141	M	A	16	I	
H-11	PEMA	0142	F	A	15	A	pregnant
H-13	PEMA	0143	M	A	17	A	
C-4	PEMA	0145	F	A	22	A	pregnant
C-1	EUMI	0151	M	A	U	I	
A-1	PEMA	0152	M	A	23	A	
A-3	PETR	0153	F	A	16	U	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Sagebrush Grid D Sample Period 1 Trap Night 2

Date, time traps set 5/16/76 1500 Date, time traps checked 5/17/76 1400

Last toe clip # used on previous day 153 Field Analyst(s) L. Martin

Project 523 QA Check TT bvw 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
M-2	EUMI	0154	M	A	43	I	
M-10	SPLA	0401	F	A	232	U	
M-12	PEMA	0130	M	A	20	I	
K-11	PEMA	1155	F	A	18	A	pregnant
K-8	PEMA	0342	M	A	U	U	
F-1	PEMA	0155	F	J	12	I	
F-2	PEMA	0412	M	A	U	A	
F-5	PEMA	0140	M	A	15	I	
F-12	EUMI	0211	M	A	36	I	
C-10	PEMA	0122	M	A	19	A	
A-1	PEMA	0151	M	A	U	A	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Sage Brush Grid D Sample Period 7 Trap Night 2

Date, time traps set 1500 5/17/76 Date, time traps checked 1400 5/18/76

Last toe clip # used on previous day 0422 Field Analyst(s) [illegible]

Project 83 QA Check TJ

Capt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
L-4	PEMA	0424	F	A	16	A	
L-10	PEMA	0332	M	A	u	u	
J-9	PEMA	0143	M	A	u	I	
J-3	PEMA	0343	M	A	u	A	
J-1	EUMI	0423	M	A	32	I	
H-1	SPLA	0425	M	A	216	I	
G-4	PEMA	0411	M	A	u	A	
G-5	PEMA	0135	F	A	u	A	
H-3	PEMA	0431	M	J	14	I	
G-8	PEMA	0432	F	J	12	I	
H-11	PEMA	0355	M	A	u	A	
D-8	PEMA	0353	M	A	u	A	
[illegible]	EUMI	3050	M	A	30	A	
A-10	PEMA	0433	F	A	18	A	

Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid D Sample Period 7 Trap Night 2

Date, time traps 1400 5/17/76 Date, time traps checked 1300 5/18/76

Last toe clip # used on previous day 0133 Field Analyst(s) [illegible]

Project 03 QA Check bmm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
L-10	PemA	0434	F	A	17	A	
J-10	PemA	0435	m	A	24	I	
J-9	PemA	0334	m	A	u	I	
J-6	PemA	0343	m	A	u	A	
J-5	EumI	1431	F	A	40	A	
J-2	SpLA	0441	F	A	188	I	
J-1	EumI	0151	m	A	u	A	
E-5	EumI	0422	F	A	u	A	
E-6	PemA	0141	m	J	u	I	
F-8	EumI	0123	F	A	42	A	
F-12	PemA	0304	F	A	16	A	
C-8	EumI	3000	m	A	u	I	
C-3	PemA	0111	m	A	u	A	
A-10	PemA	0442	m	A	20	A	
A-7	PemA	0443	F	A	23	A	
A-1	PemA	0151	m	A	u	A	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name N. Sagebrush Grid D Sample Period 7 Trap Night 3

Date, time traps set 5/17/76 1400 Date, time traps checked 5/18/76 1300

Last toe clip # used on previous day 0210-0434 Field Analyst(s) Clark

Project 83 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
M-11	PEMA	0124	m	A	u	D	
K-13	PEMA	0323	m	A	u	A	Swollen testes
K-11	PEMA	0212	m	A	20	A	" "
K-10	PEMA	0332	m	A	u	A	" " } Same trap
K-10	PEMA	0213	F	J	14	I	
K-6	PEMA	0242	m	A	u	D	
~~K-2~~	~~[illegible]~~						~~[illegible]~~
K-1	SPLA	0214	F	A	188	A	Lact.
H-4	SPLA	0215	m	A	196	I	(marked 0210 0215)
G-5	PEMA	0135	F	A	u	A	lact.
H-6	EUMI	0355	F	A	u	A	lact.
H-5	PEMA	0341	m	A	u	I	suffering from exposure
G-8	PEMA	0432	F	J	u	I	
H-9	SPLA	3005	m	A	186	I	
H-10	PEMA	0355	m	A	u	A	Swollen testes
H-11	PEMA	0143	m	A	u	I	Suffering from ex[illegible]
H-12	EUMI	0221	m	A	30	I	
D-11	SPLA	0222	F	A	242	A	Preg.
D-8	PEMA	0353	m	A	u	A	Swollen testes
D-2	PEMA	0412	m	A	u	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Sagebrush Grid D Sample Period 7 Trap Night 4

Date, time traps set 1300 5/18/76 Date, time traps checked 1130 5/19/7.

Last toe clip # used on previous day 0443 Field Analyst(s) [illegible]

Project 93 QA Check 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
L-12	PemA	0333	M	A	u	A	
J-13	PemA	0444	M	A	13	A	
J-9	PemA	0334	M	A	u	A	
J-3	PemA	0445	F	J	12	I	
I-4	EumI	1201	F	A	40	A	
J-3	PemA	0451	F	J	11	I	
F-6	PemA	0452	F	A	20	A	
E-7	PemA	0411	M	A	u	A	
F-9	PemA	0135	F	A	u	A	
E-10	PemA	0355	M	A	u	A	
C-11	PemA	0122	M	A	u	A	
C-6	SPLA	4414	M	A	202	I	
[illegible]	EumI	0151	M	A	30	I	
A-1	PemA	0151	M	A	u	A	
A-3	EumI	0453	M	A	32	I	
A-6	SPLA	0454	M	A	198	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Sagebrush Grid ____ Sample Period 7 Trap Night 4

Date, time traps set 5/18/78 1300 Date, time traps checked 5/19/78 1130

Last toe clip # used on previous day 0222 Field Analyst(s) McGregor

Project ____ QA Check bum

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
I-2	PEMA	0223	F	A	22	A	LAC 1
I-1	PEMA	0224	F	A	20	A	
C-13	PEMA	0225	M	A	20	A	
H-4	PEMA	0343	M	A	16	A	
G-10	SPLA	0231	M	A	188	A	
D-8	PEMA	0353	M	A	16	A	
F-7	PEMA	0432	F	A	16	I	
D-6	PEMA	0141	M	A	16	A	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Sagebrush Grid D Sample Period 7 Trap Night 5

Date, time traps set 5/19/76 1200 Date, time traps checked 5/20/76 1300

Last toe clip # used on previous day 0231 Field Analyst(s) L. Martin

Project 23 QA Check bmw 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
K-13	PEMA	0144	M	A	11	I	
H-1	PEMA	0232	F	A	15	I	
H-3	PEMA	0233	F	J	11	I	
G-10	PEMA	0354	F	A	14	I	
H-11	PEMA	0355	M	A	12	A	
C-2	PEMA	0234	F	J	12	I	
2. C-11	PEMA	0415	F	A	21	A	pregnant
C-13	PEMA	0235	M	A	14	A	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid D Sample Period 7 Trap Night 5

Date, time traps set 1300 5/19/76 Date, time traps checked 1300 5/20/76

Last toe clip # used on previous day 0454 Field Analyst(s) [illegible]

Project 83 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
L-6	EUMI	0455	F	A	35	A	
J-3	PEMA	0343	M	A	u	A	
F-2	PEMA	1111	M	A	17	I	
E-5	PEMA	0141	M	A	u	A	
E-7	PEMA	1112	M	A	u	A	
F-7	PEMA	0135	F	A	u	A	
F-3	PEMA	0353	M	A	u	I	
D-12	SPLA	1113	M	A	176	I	
D-9	PEMA	0122	M	J	u	D	HAVAHART BAIT
D-8	PEMA	0142	F	A	u	A	
D-4	PEMA	1114	M	A	u	A	
D-2	PEMA	1115	M	A	u	I	
B-4	PEMA	0411	M	J	u	D	HAVAHART
B-3	SPLA	0421	F	A	u	I	
B-12	SPLA	1121	F	J	96	I	
A-10	PEMA	0442	M	A	u	A	
A-1	EUMI	1122	F	A	32	I	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Site Mixed Brush Grid E Sample Period 7 Trap Night 1

Date, time traps set 15 May 1976 (0800) Date, time traps checked 16 May 1976 (0800

Last toe clip # used on previous day 1114 Field Analyst(s) Reyes / McGregor

Project 83 QA Check JJ bm 5-21-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
H-2	PEMA	1115N	M	A	18	A	—
J-2	PEMA	1121 N	F	A	20	I	—
L-3	PEMA	1122 N	F	A	21	A	—
L-6	PEMA	1123N	F	A	19	A	—
L-8	PEMA	1124 N	M	A	20	A	—
L-12	PEMA	1125N	M	A	19	A	—
J-13	PEMA	1131 N	F	A	21	A	—
J-12	PEMA	1132 N	F	A	19	I	—
J-10	PEMA	1133 N	M	A	20	A	—
J-8	PEMA	1134 N	M	A	18	I	—
J-6	PEMA	0443	M	A	20	A	—
J-4	PEMA	1304	F	A	20	A	—
F-3	PEMA	1135N	M	A	19	A	—
E-7	PEMA	1141 N	M	A	19	I	—
E-8	PEMA	0312	M	A	19	A	—
E-9	EUMI	1142N	M	A	28	A	—
E-10	PEMA	1143N	M	A	14	A	brown Fur, Thinning Fu
F-10	PEMA	0311	M	A	16	I	—
C-13	EUMI	0345	F	A	50	A	preg. LacT.
C-4	EUMI	1144 N	M	A	28	A	—
C-3	PEMA	1145N	M	A	16	A	Lethargic

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Mixed Brush Grid E Sample Period 7 Trap Night 1

Date, time traps set 15 May 1976 0800 Date, time traps checked 16 May 1976 (0800)

Last toe clip # used on previous day 0411 Field Analyst(s) Reyes / McGregor

Project 83 QA Check JJ bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
I-1	SPLA	1014	F	A	200	A	lactating
K-1	EOMI	1205	F	A	[illegible]	P	pregnant
[illegible]-2	[illegible]	0405	M	A	32	A	[illegible]
M-10	[illegible]	0412	[illegible]	J	15	[illegible]	[illegible]
M-12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
L-10	[illegible]	[illegible]	F	A	[illegible]	I	none
[illegible]-3	[illegible]	[illegible]	F	A	[illegible]	A	lactating
[illegible]	[illegible]	0421	[illegible]	A	13	I	none
[illegible]	[illegible]	[illegible]	F	A	[illegible]	[illegible]	[illegible]
D-13	PEMA	[illegible]	M	A	[illegible]	I	none
D-11	PEMA	0224	M	A	15	A	none
D-10	[illegible]	[illegible]	[illegible]	A	31	A	[illegible]
D-7	[illegible]	[illegible]	F	J	12	I	none
D-8	PEMA	[illegible]	M	A	21	A	[illegible]
D-4	PEMA	[illegible]	M	[illegible]	17	A	[illegible]
[illegible]	PEMA	[illegible]	M	J	14	I	[illegible]
F-4	PEMA	[illegible]	M	A	16	I	none
B-8	EOMI	[illegible]	M	A	30	A	swollen testes
L-10	PEMA	[illegible]	F	A	20	I	none
[illegible]-1	[illegible]	[illegible]	M	A	37	[illegible]	none
[illegible]-12	PEMA	[illegible]	M	A	19	A	swollen testes
A-10	PEMA	[illegible]	M	J	15	I	none

* Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Mixed Brush Grid 5 Sample Period 7 Trap Night 2

Date, time traps set [illegible] 1976 1630 Date, time traps checked 17 [illegible] 1976 [illegible]

Last toe clip # used on previous day 1231 Field Analyst(s) [illegible]

Project [illegible] QA Check JT [illegible] 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
D-1	SUMI	1202	F	A	30	I	—
F-1	SUMI	2010	F	A	38	D	[illegible]
M-10	SUMI	0354	M	A	30	A	—
K-12	PEMA	1233	M	A	16	A	[illegible]
K-4	PEMA	1204	F	A	19	A	lactating
K-3	PEMA	0415	F	A	4	A	—
G-6	SUMI	[illegible]	F	A	4	I	—
H-10	PEMA	[illegible]	M	A	17	A	Swollen [illegible]
H-12	PEMA	0422	F	A	4	D	-
D-10	PEMA	1144	M	J	13	I	2 [illegible]
B-8	SUMI	1462	M	A	27	I	ticks
B-10	PEMA	0344	F	A	20	A	lactating
[illegible]	SUMI	1232	F	A	27	A	[illegible]
I-12	PEMA	1225	M	A	16	A	—
A-10	PEMA	0221	M	J	12	I	—

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid L Sample Period 7 Trap Night 2

Date, time traps set 16 May 1976 1030 Date, time traps checked 17 May 1976 (0815)

Last toe clip # used on previous day 1145 Field Analyst(s) [illegible]

Project P3 QA Check [illegible]

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
-2	PEMA	1415	M	A	22	A	4 Ticks
1-2	PEMA	1421	M	A	14	A	Sickly
-2	PEMA	1111	F	A	22	I	
-2	PEMA	1422	M	A	18	A	
-10	PEMA	0313	M	A	20	A	
-12	PEMA	1423	M	A	18	A	
-13	PEMA	1131	F	A	24	A	LACT.
1-13	PEMA	1424	M	A	18	A	
1-12	PEMA	1133	F	A	u	I	
-5	PEMA	1425	F	A	20	I	
[illegible]	PEMA	1143	M	A	u	A	
-4	PEMA	0131	M	A	u	A	
-7	PEMA	1141	F	A	u	I	
-8	PEMA	0425	M	A	u	A	
E-9	EUMI	1401	M	A	u	A	
-12	EUMI	1010	M	A	u	A	
-3	PEMA	0432	M	A	u	A	
1-3	PEMA	1431	M	A	18	A	

* Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Mixed Brush Grid I Sample Period 7 Trap Night [illegible]

Date, time traps set 17 May 1976 (1630) Date, time traps checked 18 May 1976 (0900)

Last toe clip # used on previous day 1431 Field Analyst(s) Parker

Project 83 QA Check bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
D-2	PEMA	1045	m	A	23	I	[illegible]
H-2	PEMA	1421	m	A	u	I	
L-8	PEMA	1124	m	A	u	A	
L-13	PEMA	1423	m	A	u	A	
K-13	PEMA	1432	F	J	14	I	
J-13	PEMA	1424	m	A	u	u	
J-12	PEMA	1133	F	A	u	A	pregnant
J-10	PEMA	0312	m	A	u	A	
J-5	EUMI	1405	F	A	35	I	
I-5	PEMA	1425	F	A	u	u	
J-4	PEMA	1304	F	A	19	A	pregnant
E-5	PEMA	1141	F	A	u	A	"
[illegible]7	PEMA	0425	m	A	u	I	
E-8	PEMA	0421	m	A	u	u	
C-12	PEMA	0224	m	A	19	A	
A-3	PEMA	1431	m	A	u	I	
A-10	PEMA	0231	m	A	13	A	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 5 Sample Period 7 Trap Night 3

Date, time traps set [illegible] Date, time traps checked [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project 83 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
M-2	PEMA	1234	F	A	19	A	lactating
M-4	[illegible]	1123	[illegible]	A	u	[illegible]	—
M-10	[illegible]	0405	M	A	28	A	[illegible]
M-11	PEMA	[illegible]	[illegible]	A	20	A	[illegible]
K-12	PEMA	[illegible]	F	A	u	I	—
K-11	PEMA	1241	F	A	[illegible]	I	—
K-10	PEMA	1212	M	A	18	A	—
K-4	PEMA	[illegible]	M	A	15	A	—
K-3	PEMA	0415	T	A	u	A	—
H-4	[illegible]	1244	M	A	35	A	[illegible]
[illegible]	PEMA	1165	M	J	u	I	—
[illegible]	PEMA	[illegible]	M	A	u	A	—
[illegible]	EUMI	1402	M	A	u	A	—
B-6	PEMA	[illegible]	F	A	u	A	—
B-10	PEMA	1144	M	A	u	A	—
B-12	PEMA	1244	M	J	14	I	change [illegible]
B-13	[illegible]	1010	M	A	30	A	desc. teste
A-12	[illegible]	1245	F	A	30	I	—

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid L Sample Period 7 Trap Night 4

Date, time traps set [illegible] Date, time traps checked [illegible]

Last toe clip # used on previous day 1245 Field Analyst(s) [illegible] / Clark

Project 83 QA Check [illegible] 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
B-1	PEMA	1251	F	A	19	I	—
K-1	PEMA	1421	M	A	U	A	—
H-3	PEMA	1122	F	A	U	A	—
K-13	PEMA	[illegible]	F	A	U	D	—
K-12	PEMA	1233	M	A	U	A	—
K-11	PEMA	1241	F	A	U	I	—
K-10	PEMA	1242	M	[illegible]	U	A	could be 1242? [illegible]
G-8	PEMA	1252	F	J	14	I	— very weak!
H-10	PEMA	[illegible]	M	A	U	A	—
H-12	PEMA	1253	M	A	19	A	—
D-10	PEMA	1144	M	A	U	A	—
D-6	PEMA	1145	M	A	U	A	—
[illegible]	PEMA	1415	M	A	U	A	—
B-6	PEMA	1254	M	A	18	A	—
B-8	EUMI	0133	M	A	27	A	—
[illegible]-10	PEMA	0433	M	A	U	A	ticks
[illegible]-13	EUMI	1255	M	A	32	A	—
A-12	EUMI	1010	M	A	U	A	—
A-10	EUMI	1033	F	A	40	A	[illegible]
							[illegible]

* Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid E Sample Period 7 Trap Night 4

Date, time traps set 13 May 1976 (1520) Date, time traps checked 14 May 1976 (0810)

Last toe clip # used on previous day 1432 Field Analyst(s) [illegible] / Clark

Project 83 QA Check bm

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
J-3	PEMA	1111	F	A	U	U	—
K-2	PEMA	0415	F	A	U	A	preg
L-2	SUMI	1432	M	A	U	A	escaped
L-11	PEMA	1125	M	A	U	A	swollen testes
I-12	PEMA	1423	M	A	U	D	—
J-13	PEMA	1424	M	A	U	I	—
J-12	PEMA	1436	F	J	14	I	—
I-9	PEMA	0421	M	A	U	D	—
I-10	PEMA	1130	M	A	U	I	[illegible]
I-5	PEMA	1425	F	A-J	U	D	
J-4	PEMA	1304	F	A	U	I	suffering from [illegible]
~~F-4~~	~~[illegible]~~						~~[illegible]~~
F-6	PEMA	1141	F	A	U	A	preg
F-7	PEMA	0425	M	A	U	A	[illegible]
F-11	PEMA	0311	F	A	18	A	Lact
C-12	PEMA	0224	M	A	U	A	swollen testes
C-3	PEMA	0432	M	A	U	I	—
A-3	PEMA	1431	M	A	U	I	—
C-11	MILO	1435	F	A	26	A	lact.

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid # F Project 03 Trap Night 5

Date, time traps set [illegible] Date, time traps checked [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s)

QA Check bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal ~~Trap~~ Weight	Reprod. Status	Additional Notes*
B-1	PEMA	1151	M		18		
K-1	PEMA	1421	M	A			
K-2	PEMA	[illegible]					
M 12	PEMA	[illegible]	M	A	[illegible]	[illegible]	
K-12	[illegible]	1133	[illegible]			A	
K-12	PEMA	[illegible]	M	A	[illegible]	A	
[illegible]	PEMA	1124				A	
H-6	PEMA	[illegible]	M		16	A	
H-7	PEMA	1311	M		15	A	
[illegible]	PEMA	1252					
H-[illegible]	PEMA	0312	M	A	[illegible]		
H-12	[illegible]	1312					
[illegible]	[illegible]	0423	M				
[illegible]	PEMA	1313	M		22	A	
D-10	PEMA	0924		J	[illegible]	[illegible]	
D-[illegible]	PEMA	0344		A	[illegible]		
D-6	PEMA	[illegible]		A	[illegible]	A	
D-5	PEMA	[illegible]	M	A	[illegible]	A	
B-6	[illegible]	0433			[illegible]	T	[illegible] weak
B-8	PEMA	[illegible]	M		[illegible]	T	
B-10	PEMA	[illegible]	M		[illegible]	A	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid # T Project [illegible] Trap Night 5

Date, time traps set [illegible] Date, time traps checked 20 Mar 1980 [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

QA Check

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Trap Weight	Reprod. Status	Additional* Notes
D-2	PEMA	1135	M	A	U	D	
F-2	PEMA	1115	M	A	U	A	
J-2	PEMA	1111	F	A	20	U	
L-8	PEMA	1441	F	A	20	A	
L-10	PEMA	1442	F	A	24	A	LACT.
J-10	PEMA	1243	M	A	11	A	
J-9	PUMT	0414	F	A	U	D	
F-3	PEMA	0431	M	A	16	A	
F-7	PEMA	1141	F	A	11	A	LACT.
F-9	PEMA	1443	M	A	16	A	
F-10	PEMA	1444	M	A	18	I	
C-12	PEMA	1445	F	A	18	A	LAC.
F-3	PEMA	1451	M	A	19	T	
A-10	PEMA	0531	M	A	14	A	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 1 Sample Period 7 Trap Night 1

Date, time traps set 15 May 1976 (13[illegible]) Date, time traps checked 1[illegible] May 1976 (1

Last toe clip # used on previous day 03[illegible] Field Analyst(s) [illegible]

Project [illegible] QA Check ✓ [illegible] 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
F-3	PEMA	0340	F	A	20	A	—
H-1	EUMI	0045	U	A	42	D	—
D-10	CLGA	0350N	M	A	18	D	—
H-13	PEMA	0410N	F	A	16	I	—
H-12	PEMA	0420N	M	A	16	A	—
I-10	PEMA	0430N	M	A	14	D	—

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

rid Name Doug-fir Grid F Sample Period 7 Trap Night 1

ıte, time traps set 15 May 1976 (1230) Date, time traps checked 16 May 1976 (11

ast toe clip # used on previous day 3000 Field Analyst(s) [illegible] & McG

roject 83 QA Check TJ

ıpt.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
[illegible]	[illegible]	[illegible]	M	A	[illegible]	I	---
[illegible]	[illegible]	3010	F	A	[illegible]	[illegible]	---
[illegible]	[illegible]	3020	F	A	[illegible]	[illegible]	--
[illegible]	[illegible]	[illegible]	M	I	[illegible]	I	--

ey taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid F Sample Period 1 Trap Night 2

Date, time traps set [illegible] Date, time traps checked [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project [illegible] QA Check bmw 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
F-3	EUMI	0304	M	A	34	A	
H-1	CLGA	0440	M	A	20	D	
D-5	CLGA	0450	M	A	18	D	
D-10	CLGA	1001	F	A	16	A	
H-11	PEMA	1002	M	A	22	A	
J-10	CLGA	1003	F	A	20	A	
J-8	PEMA	1004	M	A	20	A	

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid I Sample Period 7 Trap Night 3

Date, time traps set [illegible] (1700) Date, time traps checked 18 May 1976 (1100)

Last toe clip # used on previous day 3030 Field Analyst(s) [illegible] Martin

Project 83 QA Check bmw 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
F-2	PEMA	0340	F	A	[illegible]	A	lactating ?
H-13	CLGA	3040	M	A	[illegible]	I	[illegible]
D-5	PEMA	1005	M	A	19	A	—
E-7	PEMA	0050	M	A	15	I	—

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid F Sample Period 7 Trap Night [illegible]

Date, time traps set [illegible] Date, time traps checked [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project [illegible] QA Check bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
F-[illegible]	[illegible]	[illegible]	[illegible]	A	[illegible]	A	[illegible]
D-5	CLGA	3100	[illegible]	A	[illegible]	—	—
F-11	[illegible]	[illegible]	[illegible]	[illegible]	22	A	—
F-13	[illegible]	[illegible]	M	[illegible]	16		[illegible]
H-13	[illegible]	3200	F		27	[illegible]	[illegible]
H-12	PEMA	[illegible]	M	A	U	A	—
[illegible]	CLGA	[illegible]	F	A	U	D	—
I-6	PEMA	1064	M	A	U	I	—
H-10	PEMA	[illegible]	M	A	U	I	—

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name Douglas fir Grid F Sample Period 7 Trap Night 5

Date, time traps set 19 May 1976 (1115) Date, time traps checked 20 May 1976 (101

Last toe clip # used on previous day 3100 Field Analyst(s) Reeve/ McGree

Project 83 QA Check bm 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
9	PEMA	0030			14		natural amputee?
D-5	CLGA	3100	M	A		I	
I-6	PEMA	1004					

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid G Sample Period 7 Trap Night 1

Date, time traps set [illegible] (14[illegible]) Date, time traps checked [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project [illegible] QA Check π lum 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
D-4	PEMA	1010 N	M	A	18	A	—
D-8	PEMA	1020 N	M	A	14	A	—
D-10	PEMA	1030 N	M	A	14	A	—
F-10	PEMA	0311	M	A	20	A	—
F-11	PEMA	1040 N	M	A	18	A	—
F-12	CLGA	1050 N	M	A	16	D	—
H-11	PEMA	1100 N	F	J	12	I	—
J-10	CLGA	0025	F	A	16	I	—
J-4	PEMA	1200 N	F	J	12	I	—
H-4	PEMA	1300 N	M	A	18	A	—
H-3	EUMI	0035	M	A	34	A	—
F-1	PEMA	1400 N	M	A	12	D	—

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

File No.

Grid Name [illegible] Grid 6 Sample Period 7 Trap Night 1

Date, time traps set [illegible] (1420) Date, time traps checked [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project [illegible]

QA Check

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
[illegible]5	[illegible]	4100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]7	[illegible]	4200	M	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]9	[illegible]	0340	[illegible]	A	22	[illegible]	[illegible]
[illegible]	[illegible]	4300		[illegible]	[illegible]	[illegible]	—
[illegible]	CLGA	4400		[illegible]	[illegible]	[illegible]	—

*Key taxonomic characters, physical condition of animal, etc.

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SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 6 Sample Period 7 Trap Night 2

Date, time traps set [illegible] Date, time traps checked 17 MAR 1976 [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project [illegible] QA Check bcw 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
H-12	PEMA	1040	M	A	u	A	
J-10	CLGA	2001	M	A	18	A	
H-9	CLGA	0440	M	A	16	A	
H-8	PEMA	1200	M	A	-u	A	
H-2	PEMA	1010	M	A	-u	A	
F-1	EUMI	0204	M	A	36	A	
F-2	PEMA	2002	M	A	16	A	
G-5	PEMA	1020	M	A	-6	A	
F-9	PEMA	2003	F	A	24	A	LACT.

*Key taxonomic characters, physical condition of animal, etc.

RBOSP PROGRESS REPORT

070/060175

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Sheet 1 of 2

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 6 Sample Period 7 Trap Night 3

Date, time traps set 12 [illegible] 1930 Date, time traps checked [illegible] 1976 [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project 83 QA Check [illegible] 5-26-76

apt. oc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
-2	PEMA	2022	M	A	U	A	
-1	PEMA	2004	F	J	12	I	
4-3	PEMA	1010	M	A	U	I	
4-4	PEMA	2005	F	J	13	I	
I-4	PEMA	1200	F	A	U	I	
I-10	CLGA	2010	F	A	13	I	
H-11	PEMA	4200	M	A	U	I	
H-12	PEMA	1040	M	A	U	D	dead
F-10	PEMA	1300	M	A	U	U	

*Key taxonomic characters, physical condition of animal, etc.

070/060175

RBOSP PROGRESS REPORT

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Sheet 2 of 2

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 6 Sample Period 7 Trap Night 3

Date, time traps set 17 [illegible] 1450 Date, time traps checked 18 [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project 83 QA Check bem

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
J-7	PEMA	[illegible]	M	[illegible]	[illegible]	[illegible]	[illegible]
H-7	PEMA	1011	M	[illegible]	[illegible]	A	–
G-8	CLGA	[illegible]	F	[illegible]	[illegible]	I	–
F-9	PEMA	[illegible]	[illegible]	[illegible]	[illegible]	A	[illegible]
F-6	[illegible]	[illegible]	F	A	[illegible]	A	[illegible]
E-6	[illegible]	1012	F	A	[illegible]	A	[illegible]

*Key taxonomic characters, physical condition of animal, etc.

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RBOSP PROGRESS REPORT

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File No:

Sheet 1 of 1

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name [illegible] Grid 6 Sample Period 7 Trap Night 4

Date, time traps set [illegible] 1976 [illegible] Date, time traps checked [illegible] 1976 (12:45)

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project 83 QA Check [illegible] 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional* Notes
[illegible]	PEMA	[illegible]	F	A	[illegible]	A	Lactating
E-5	PEMA	[illegible]	M	A	U	A	–
G-4	PEMA	1020	M	A	U	A	–
H-5	PEMA	2004	F	J	U	I	–
G-8	CLGA	[illegible]	M	A	U	A	–
[illegible]	[illegible]	[illegible]	F	A	U	A	–
I-4	PEMA	1010	M	A	U	I	–
F-1	PEMA	2009	F	J	U	D	–
H-3	PEMA	2002	M	J	U	D	–
J-10	CLGA	2031	M	A	U	A	Swollen testes
I-10	PEMA	2020	M	J	15	I	–
H-11	PEMA	U200	M	J	U	I	–
H-12	CLGA	2030	M	J ?	17	I	–
F-13	PEMA	2040	F	A	22	A	preg.

* taxonomic characters, physical condition of animal, etc.

50175

[illegible] PROGRESS REPORT

File No: ____________

Sheet 1 of 1

SMALL MAMMAL LIVE TRAPPING FIELD DATA SHEET

Grid Name ASPEN Grid 5 Sample Period [illegible] Trap Night ~~4~~ 5

Date, time traps set [illegible] (1345) Date, time traps checked [illegible]

Last toe clip # used on previous day [illegible] Field Analyst(s) [illegible]

Project [illegible] QA Check 5-26-76

Capt. Loc.	Species	Toe Clip No.	Sex	Age Class	Animal Weight (gm)	Reprod. Status	Additional Notes*
[illegible]	[illegible]	300			U		
G-4	[illegible]	1013			24		
[illegible]				A	U	A	
[illegible]		1014	M	J		I	
[illegible]	[illegible]	1015			22		[illegible]
H-2	CLGA	[illegible]25	F		U	U	
H-7		4200	M	A	U	A	----
F9	[illegible]	2003	F		U		----
I-6	[illegible]	1021					----
[illegible]	[illegible]	2050	M	A	[illegible]	A	—
[illegible]	[illegible]	[illegible]	M	A	U	A	—
[illegible]	[illegible]	[illegible]	M	A	[illegible]	A	---
[illegible]	CLGA	[illegible]	M	A	[illegible]		—
J-1[illegible]	CLGA	1001	M	A	U	T	—
J-[illegible]	[illegible]	[illegible]	F	A	U	T	--
J-5	[illegible]	100[illegible]	M	A	[illegible]	T	—
H-4	[illegible]	[illegible]	F	A	U	A	—
H-1	MILO	[illegible]	M	A	22	T	—
E-[illegible]	EUMI	1012	F	A	[illegible]	A	[illegible]

*Key taxonomic characters, physical condition of animal, etc.

070/060175

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SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number 1 Location BOTTOMLAND MEADOW Field Analysts MARTIN / Turner

Sampling Period 7 Project Number 33 QA Check [illegible] 5-26-76

Date	Species	Sex	Age	Comments*
5/15/76	NO CAPTURES			
5/16/76	NO CAPTURES			
5/17/76	NO CAPTURES			
5/18/76	NO CAPTURES			

eproductive condition, diagnostic characters, future use of pecimens, etc.

RBOSP PROGRESS REPORT

File No.:

SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number 2 Location Sagebrush Field Analysts Sang / Clark

Sampling Period 7 Project Number 83 QA Check 5-26-76

te	Species	Sex	Age	Comments*
5/15/76	PEMA	♂	A	voucher
5/16/76	No captures			
5/17/76	No captures			
5/18/76	No captures			

Pitfalls closed

*Reproductive condition, diagnostic characters, future use of specimens, etc.

RBOSP PROGRESS REPORT

SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number 3 Location [illegible] Field Analysts [illegible]
Sampling Period 7 Project Number 93 QA Check hm 5-26-76

Date	Species	Sex	Age	Comments*
5/16/76	NO CAPTURES			
5/17/76	NO CAPTURES			
5/18/76	Vole (TO BE ID'ED)			
5/19/76	NO CAPTURES			

eproductive condition, diagnostic characters, future use of
cimens, etc.

BBOSP PROGRESS REPORT

SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number 4 Location P-1 [illegible] Field Analysts [illegible]

Sampling Period 7 Project Number [illegible] QA Check bmw 5-26-76

Date	Species	Sex	Age	Comments*
5/16/76	NO CAPTURES			
5/17/76	NO CAPTURES			
5/18/76	6 PEMA juveniles			TO BE POSITIVELY ID'ED
5/19/76	NO CAPTURES			

*Reproductive condition, diagnostic characters, future use of specimens, etc.

GDCSP PROGRESS REPORT

File No:

SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number 6 Location P.J./ Sage Field Analysts Sam / Clark

Sampling Period 7 Project Number 83 QA Check bm 5-26-76

Date	Species	Sex	Age	Comments*
5/17/76	No Captures			
5/18/76	No Captures			
5/19/76	No Captures			
5/20/76	Peromyscus MANiculaTus	M	A	

eproductive condition, diagnostic characters, future use of
ecimens, etc.

RBOSP PROGRESS REPORT

057/060175

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SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number 7 Location Upland Meadow Field Analysts Reyes | McGregor

Sampling Period 7 Project Number 83 QA Check lvm 5-26-76

te	Species	Sex	Age	Comments*
15 May 1976	NO CAPTURES			
16 MAY 1976	NO CAPTURES			
17 MAY 1976	NO CAPTURES			
18 May 1976	NO CAPTURES			

*Reproductive condition, diagnostic characters, future use of specimens, etc.

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CP PROGRESS REPORT

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SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number A Location greasewood sage Field Analysts Sang
Sampling Period 7 Project Number 83 QA Check bcm 5-26-76

Date	Species	Sex	Age	Comments*
5/17/76	No captures			
5/18/76	No captures			
5/19/76	No captures			
5/20/76	No captures			

Pitfall closed

*Reproductive condition, diagnostic characters, future use of specimens, etc.

RBOSP PROGRESS REPORT

SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number B Location South P-J Field Analysts [illegible]

Sampling Period 7 Project Number [illegible] QA Check bmw 5-26-76

Date	Species	Sex	Age	Comments*
/16/76	No Captures			
5/17/76	No Captures			
5/18/76	No Captures			
5/19/76	No Captures			

*Reproductive condition, diagnostic characters, future use of specimens, etc.

RBOSP PROGRESS REPORT

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File No: ____

SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number C Location north P.J. Field Analysts Sang / Clark
Sampling Period 7 Project Number 83 QA Check bum 5-26-76

Date	Species	Sex	Age	Comments*
5/16/76	No Captures			
5/17/76	No Captures			
5/18/76	No Captures			
5/19/76	No Captures			
	pitfalls closed			

* Reproductive condition, diagnostic characters, future use of specimens, etc.

RBOSP PROGRESS REPORT

File No: ____________

SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number D Location Sagebrush Field Analysts Sarg / Clark

Sampling Period 7 Project Number 93 QA Check hmw 5-26-76

Date	Species	Sex	Age	Comments*
5/16/76	No Captures			
5/17/76	No Captures			
5/18/76	No Captures			
5/19/76	No Captures			

Pitfalls filled

* Reproductive condition, diagnostic characters, future use of specimens, etc.

SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number E Location Mixed · Brush Field Analysts Reyes / McGregor
Sampling Period 7 Project Number 83 QA Check lmw 5-26-76

Date	Species	Sex	Age	Comments*
15 May 1976	NO CAPTURES			
16 MAY 1976	NO CAPTURES			
17 MAY 1976	NO CAPTURES			
18 MAY 1976	2 PEMA	2 ♂	J	

productive condition, diagnostic characters, future use of pecimens, etc.

RBOSP PROGRESS REPORT

File No: ______

SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number F Location Douglas Fir Field Analysts Rogers / McGregor

Sampling Period (mo.) 7 Project Number 83 QA Check brm 5-26-76

e	Species	Sex	Age	Comments*
15 May 1976	no captures			
16 [illegible] 76	"			
17 May 76	3? PEMA	3M	J	
18 May 76	no captures			

* Reproductive condition, diagnostic characters, future use of specimens, etc.

RBOSP PROGRESS REPORT

SMALL MAMMAL PITFALL FIELD DATA SHEET

tfall Number G Location ASPEN Field Analysts Reyes / McGregor

mpling Period (No.) 7 Project Number 83 QA Check bm 5-26-76

Date	Species	Sex	Age	Comments*
5 May 1976	NO CAPTURES			
6 MAY 1976	No Captures			
7 MAY 1976	No Captures			
8 MAY 1976	NO CAPTURES			

Reproductive condition, diagnostic c[illegible]ters, future use of specimens, etc.

RBOSP PROGRESS REPORT

File No: ____________

SMALL MAMMAL PITFALL FIELD DATA SHEET

Pitfall Number 15 Location Riparian · STAKE Spring Field Analysts Turner

Sampling Period 7 Project Number 83 QA Check 5-26-76

e	Species	Sex	Age	Comments*
5/18/76	NO CAPTURE			
5/19/76	NO CAPTURE			
5/20/76	NO CAPTURE			
5/21/76	NO CAPTURE			

* Reproductive condition, diagnostic characters, future use of specimens, etc.

[illegible] PROGRESS REPORT

greasewood-
sage

File No: 83.C.5.2.2.PF

SNAP TRAP LINE RECORD SHEET

14 May 76

Collector: B Elliug
Date: 14-18 May
Project: 83
Location: T 15 R 98W S 30 ~~##~~ 1/4 ~~8~~ SW
Vegetation Type: Greasewood-Sagebrush
Trap Type: Snap
No. of Traps: 40
No./Station: 2
Approximate Spacing of Stations: 10 M
Bait: peanut butter
QA Check: WT Brm
Date: 6-2-76

	Species	♂ Juv.	♂ Ad.	♀ Juv.	♀ Ad.	Specimen Disposition
14 May	~~?~~ PEMA (Trap 16)		X			bagged & labelled
	PEMA (9)		X			"
	PEMA (8)		X			"
	PEMA ([illegible])	X				"
	PEMA (14)				X	"
	PEMA (2)				X	"
	PEMA (1)				X	"
15 May	PEMA	X	~~X~~			
	PEMA			X		
	PEMA				X	lactating?
	PEMA		X			
	EUMI			X		
	EUMI				X	
	EUMI				X	
16 May	EUMI				X	
	EUMI				?	eaten by beetles

PEMA X disposed

Comments: (empty or missing traps, unusual occurrences, etc.)

PEMA X

PEMA X

disposed

Line pulled 18 May 1976 [illegible]

072/060175

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South
P-5 ✓

File No: ______

SNAP TRAP LINE RECORD SHEET

14 May

Collector: BEK
Date: 14 May 1976 (17) Project: 83
Location: T 1S R 99W S 33 ~~1/4~~ 1/4 S NE Vegetation Type: ~~Grassland~~ Pinyon - Juniper (Juni Sac
Trap-Type: Snap No. of Traps: 40 No./Station: 2
Approximate Spacing of Stations: 10M Bait: peanut butter
QA Check: WTT bm Date: 6-2-76

	Species	♂ Juv.	♂ Ad.	♀ Juv.	♀ Ad.	Specimen Disposition
14 May	PEMA (trap set 1)		X			bagged & labelled
	EUMI (1)		X			"
	PEMA (8)				X	"
15 May	Golden mantled g.s.					
	Eumi		X			
	PEMA			X		
	PEMA	X				
16	EUMI					
	PEMA					
	PEMA				X	
	[illegible]				X	
17 May	EUMI				X	

Comments: (empty or missing traps, unusual occurrences, etc.)

found juv. golden mantle (?) at set 3 - still fresh, no sign of broken bones or other trap marks (specimen saved)

Line pulled 17 May 1976
WTT

072/060175

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North 3
P-J

File No:

SNAP TRAP LINE RECORD SHEET

Collector: P. Elling
Date: 15 May to 19 May, 1976
Project: 83
Location: T 15 R 99W S 33 ~~1/4~~ 1/4 S SE
Vegetation Type: Pinyon-juniper (north face)
Trap Type: Snap
No. of Traps: 40
No./Station: 2
Approximate Spacing of Stations: 10M
Bait: peanut butter
QA Check: [illegible]
Date: 6-2-76

Species	Number of Animals ♂ Juv.	♂ Ad.	♀ Juv.	♀ Ad.	Specimen Disposition
15 May – no captures					
16 May no captures					
17 May PEMA				X	
18 May PEMA		X			

Comments: (empty or missing traps, unusual occurrences, etc.)

line pulled 19 May 1976
GAR

upland
Sage A

File No: ____________

SNAP TRAP LINE RECORD SHEET

14 May

Collector: BElkny   Date: 14-18 May 76   Project: 83
Location: T 25 R 99W S 8 1/4 1/4 S SE   Vegetation Type: Sagebrush
Trap Type: snap   No. of Traps: 40   No./Station: 2
Approximate Spacing of Stations: 10M   Bait: peanut butter
QA Check: UAT [illegible]   Date: 6-4-76

Species	Number of Animals ♂ Juv.	♂ Ad.	♀ Juv.	♀ Ad.	Specimen Disposition
May EUMI (trap 5)			X Sub?		bagged & labelled
EUMI (11)		X			" "
PEMA (12)				X	" "
PEMA (13)		X			" "
PEMA (14)		X			" "
15 May Eumi		X			"
PEMA	X				"
16 – line pulled ✓ reset					
17 May reset.					
18 May PEMA		✓			
PEMA		✓			
PEMA				✓	
PEMA				X	
EUMI				✓	

Comments: (empty or missing traps, unusual occurrences, etc.)

added one station on 14 May – need replacement of one trap
– female vesper sparrow captured (14 may) – ~~[illegible]~~
~~for Pat~~

line pulled 19 May 1976

14 May EUMI Y
EUMI X
PEMA Y
PEMA X

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File No: ____________

SNAP TRAP LINE RECORD SHEET

Collector: [illegible]
Date: [illegible] 76
Project: 83
Location: T 2S R 102W S 22 ~~NE~~ 1/4 S NW
Vegetation Type: Mixed Brush
Trap Type: [illegible]
No. of Traps: 40
No./Station: [illegible]
Approximate Spacing of Stations: 10 ft.
Bait: peanut butter
QA Check: [illegible]
Date: 6-4-76

	Number of Animals ♂		♀		
Species	Juv.	Ad.	Juv.	Ad.	Specimen Disposition
11 May PEMA		X			disposed after analyses
[illegible]		✓			
PEMA		✓			
PEMA				✓	
PEMA				✓	
EUMI		X			
19 May P[illegible]		✓			
PEMA					
[illegible]					
PEMA				✓	
0 May EUMI				X	
EUMI				X	
PEMA		X			disposed
1 May PEMA				✓	disposed

Comments: (empty or missing traps, unusual occurrences, etc.)

line pulled 21 May 76

072/060175

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G

File No: ______________

SNAP TRAP LINE RECORD SHEET

Collector: PEYES / McGregor Date: 15 May '76 Project: 83

Location: T 2S R 102W S 3 ~~E½~~ 1/4 S SE Vegetation Type: ASPEN

Trap Type: snap No. of Traps: 40 No./Station: 2

Approximate Spacing of Stations: 10M Bait: peanut butter

QA Check: bm Date: 6-4-76

	Species	♂ Juv.	♂ Ad.	♀ Juv.	♀ Ad.	Specimen Disposition
		Number of Animals				
Day 1	PEMA				X	
	PEMA		X			
15	PEMA		X			
	PEMA		X			
	EUMI			X		
	EUMI	X				
	MILO		X			
Day 2	PEMA	X				discarded
16	PEMA					″
Day 3	[illegible]				X	″
17	PEMA				X	″
18 May	NO captures					

Comments: (empty or missing traps, unusual occurrences, etc.)

Line pulled 18 May, 1976

93C.5.2.2.2

REPRODUCTIVE STATUS DATA SHEET

Project 93 Date [illegible] Investigator [illegible]

Location T1S, R98W, S30, SW1/4 Habitat [illegible]

ture Technique [illegible]

omments bmw 6-4-76

pecies Eutamias minimus

							Embryos		Placental Scars		
	TL	T	HF	E	grams	Inactive	R	L	R	L	Comments
A	190	85	28	12	19.4	X					
B	196	84	28	13	33.0	X					
C	185	82	28	13	23.3	X					
D	170	70	28	12	38.3	X					
E											

Species Peromyscus maniculatus

							Embryos		Placental Scars		
	TL	T	HF	E	grams	Inactive	R	L	R	L	Comments
A	138	61	19	16	13.6		3	2			15mm / part term
B	150	60	19	16	14.6	X					nulliparous
C	162	68	19	17	21.3	X					11
D											
E											

Species

							Embryos		Placental Scars		
	TL	T	HF	E	grams	Inactive	R	L	R	L	Comments
A											
B											
D											
E											

REPRODUCTIVE STATUS DATA SHEET

93C.5222

Project [illegible] Date [illegible] 1976 Investigator [illegible]

Location T16, R9W, S33, NE1/4 Habitat [illegible]

re Technique [illegible]

Comments brw 6-4-76

Species *Eutamias minimus*

	TL	T	HF	E	grams	Inactive	Embryos R	Embryos L	Placental Scars R	Placental Scars L	Comments
A	200	81	26	12	38.4	X					[illegible]
B											
C											
D											
E											

Species *Peromyscus maniculatus*

	TL	T	HF	E	grams	Inactive	Embryos R	Embryos L	Placental Scars R	Placental Scars L	Comments
A	138	57	19	17	16.4	X					[illegible]
B	136	54	18	13	13.0	X					"
C	137	57	17	13	13.0	X					"
D											
E											

Species

	TL	T	HF	E	grams	Inactive	Embryos R	Embryos L	Placental Scars R	Placental Scars L	Comments
A											
B											
D											
E											

REPRODUCTIVE STATUS DATA SHEET 83.C.5.2.2.2

Project 23 Date 17 May 1976 Investigator [illegible]

Location T15, R99W, S33 SW¼ Habitat [illegible]

ture Technique [illegible]

Comments bvw 6-4-76

pecies *Peromyscus maniculatus*

	TL	T	HF	E	grams	Inactive	Embryos R	Embryos L	Placental Scars R	Placental Scars L	Comments
A	155	63	18	16	19.5	X					
B											
C											
D											
E											

Species

	TL	T	HF	E	grams	Inactive	Embryos R	Embryos L	Placental Scars R	Placental Scars L	Comments
A											
B											
C											
D											
E											

Species

	TL	T	HF	E	grams	Inactive	Embryos R	Embryos L	Placental Scars R	Placental Scars L	Comments
A											
B											
D											
E											

REPRODUCTIVE STATUS DATA SHEET

880522

Project 93 Date 19 Mar 1976 Investigator Perry

Location T2S, R98W, S8, SE¼ Habitat Sagebrush

Capture Technique snap trap line

Comments bw 6-4-76

Species *Eutamias minimus*

	TL	T	HF	E	grams	Inactive	Embryos R	Embryos L	Placental Scars R	Placental Scars L	Comments
A	204	92	29	12	33.5		—		Scars too old		[illegible]
B	187	86	28	13	28.7	×					[illegible]
C											
D											
E											

Species *Peromyscus maniculatus*

	TL	T	HF	E	grams	Inactive	Embryos R	Embryos L	Placental Scars R	Placental Scars L	Comments
A	157	57	29	14	30.5		2	3			27mm - [illegible]
B	150	63	19	15	18.7						) some litter
C	154	61	20	15	17.5						) down
D											
E											

Species

	TL	T	HF	E	grams	Inactive	Embryos R	Embryos L	Placental Scars R	Placental Scars L	Comments
A											
B											
C											
D											
E											

REPRODUCTIVE STATUS DATA SHEET

83.C.5.2.2.2.

Project 83 Date [illegible] Investigator [illegible]
Location [illegible] Habitat Mixed brush
Capture Technique [illegible]
Comments 6-4-76

Species [illegible] minimus

	TL	T	HF	E	grams	Inactive	Embryos R	Embryos L	Placental Scars R	Placental Scars L	Comments
A	200	87	26	13	48.5		[illegible]	[illegible]			5 mm -
B	197	80	29	14	29.2		4:	7			20 mm -
C											
D											
E											

Species Peromyscus maniculatus

	TL	T	HF	E	grams	Inactive	Embryos R	Embryos L	Placental Scars R	Placental Scars L	Comments
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		3	3	4	2	2nd litter still lactating
B	152	70	11	15	24.7	X					new fetuses only 5 mm
C	159	75	19	17	19.3			recent	3	0	→ 2 [illegible] scars
D								old	0	4	old + new —
E											

Species

	TL	T	HF	E	grams	Inactive	Embryos R	Embryos L	Placental Scars R	Placental Scars L	Comments
A											
B											
C											
D											
E											

REPRODUCTIVE STATUS DATA SHEET

83.C.5.2.2.2

Project 83 Date May 1976 Investigator Pauls

Location T7S, R10W, S3, SE1/4 Habitat ASPEN

ure Technique Snap trap

Comments NO CAPTURES bmw 6-4-76

Species

	TL	T	HF	E	grams	Inactive	Embryos		Placental Scars		Comments
							R	L	R	L	
A											
B											
C											
D											
E											

Species

	TL	T	HF	E	grams	Inactive	Embryos		Placental Scars		Comments
							R	L	R	L	
A											
B											
C											
D											
E											

Species

	TL	T	HF	E	grams	Inactive	Embryos		Placental Scars		Comments
							R	L	R	L	
A											
B											
D											
E											

STOMACH ANALYSIS DATA SHEET

Project 33 Date 16 May 1976 Investigator [illegible]

Location [illegible] Habitat Greasewood A

Capture Technique snap trap line

Comments bem 6-4-76

Species Eutamias minimus

	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
1	-	-		[illegible]		11	-	-	S	[illegible]		21	-	-	I	[illegible]		31	-	-	I	[illegible]		41	-	-	S	Su	
2	-	-		[illegible]		12	-	-	S	Su		22	-	-		Su		32	-	-	S	[illegible]		42	-	-	S	[illegible]	
3	-	-		Su		13	-	-	S	[illegible]		23	-	-	[illegible]	Su		33	-	-	S	[illegible]		43	-	-	S	[illegible]	
4	-	-	T	[illegible]		14	-	-	I	Su		24	-	-	[illegible]	Su		34	-	-	I	S		44	-		S	S	
5	-	-		[illegible]		15	-		S	Su		25	-	-	[illegible]	Su		35	-	-	T	[illegible]		45	-		S	[illegible]	
6	-	-		T		16	-		S	T		26	-	-	S	Su		36	-	-	T	S		46	-	-	S	[illegible]	
7	-	-		[illegible]		17			S	T		27	-	-	T	[illegible]		37	-	-		Su		47	-	-	S	T	
8	-	-	I			18		-	S	[illegible]		28	-	-	I	Su		38	-	-		S		48	-	-	S	Su	
9	-	-				19	-	-	S	I		29	-	-	I	Su		39	-	-	[illegible]	Su		49	-	-	S	[illegible]	
10	-	-	[illegible]	[illegible]		20	-	-	I	Su		30	-	-	S	S		40	-	-	S	S		50	-	-	I	Su	

Measurements

	Sex	TL	T	HF	E	grams
A	♀	190	75	29	12	18.4
B	[illegible]	[illegible]	[illegible]	[illegible]	12	[illegible]
C	[illegible]	185	[illegible]	[illegible]	13	[illegible]
D	♀	[illegible]	70	[illegible]	12	16.3

empty — no [illegible] - [illegible]

empty —

83.C.5.2.2.1

ecology consultants, inc.

2 of 2

STOMACH ANALYS ATA SHEET

Project 83 Date 17 May 1976 Investigator Pre[illegible]

Location [illegible] Habitat Greasewood [illegible] A

Capture Technique snap-trap line

Comments 6-4-76

Species Peromyscus maniculatus

	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
1	S	Su	I	S	Su	11	S	Su	Su	Su	Su	21	I	Su	Su	S	I	31	I	Su	I	Su	S	41	S	Su	S	Su	Su
2	S	S	I	Su	Su	12	S	Su	S	Su	Su	22	S	S	Su	I	Su	32	I	Su	S	S	Su	42	S	Su	S	I	Su
3	S	Su	I	S	Su	13	S	Su	S	Su	Su	23	I	S	I	S	I	33	Su	Su	S	Su	Su	43	I	Su	Su	S	Su
4	S	S	Su	Su	Su	14	Su	Su	I	Su	S	24	I	Su	I	Su	I	34	Su	Su	S	S	Su	44	S	Su	Su	Su	I
5	Su	Su	I	S	Su	15	S	Su	I	Su	Su	25	Su	S	Su	S	Su	35	I	Su	Su	Su	Su	45	S	Su	Su	S	Su
6	S	S	Su	S	S	16	S	Su	Su	Su	S	26	S	S	I	Su	Su	36	S	Su	Su	Su	Su	46	Su	S	Su	Su	S
7	S	Su	Su	Su	Su	17	I	Su	Su	S	Su	27	Su	Su	I	S	Su	37	S	Su	Su	Su	Su	47	Su	Su	Su	Su	S
8	Su	Su	Su	Su	Su	18	I	S	I	S	S	28	Su	Su	S	Su	Su	38	Su	Su	Su	S	Su	48	I	Su	S	S	Su
9	I	Su	Su	Su	Su	19	Su	S	I	S	Su	29	Su	Su	I	S	Su	39	S	S	Su	S	S	49	S	Su	Su	Su	S
10	S	Su	I	S	I	20	S	Su	Su	Su	S	30	Su	Su	I	Su	Su	40	S	S	Su	S	Su	50	Su	S	S	Su	I

Measurements						
	Sex	TL	T	HF	E	grams
A	♀	142	61	20	17	13.1
B	♀	[illegible]	61	17	16	13.6
C	♀	[illegible]	60	17	16	14.6
D	♀	162	68	19	17	21.3
E	♀	155	[illegible]	[illegible]	18	12.4

I = Lepidoptera larvae + ants,

[illegible] 3 [illegible] 15mm -

empty stomach [illegible] - [illegible]

160-63-18-16 = 14.7

agr

STOMACH ANALYSIS DATA SHEET

Project 83 Date 17 May 1976 Investigator Reyes

Location T2S, R99(W), S8 SE¼ Habitat Upland Sage

Capture Technique snap trap line

Comments brw 6-4-76

Species Peromyscus maniculatus

or bird fecal sac ?

? part of gland ?

small / ? protoplasm

	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
1	Su	S	S	S	I	11	S	Su	S	Su	S	21	S	S	S	Su	S	31	S	S	S	Su	I	41	I	S	V	Su	S
2	Su	S	S	S	S	12	S	S	S	Su	S	22	S	S	S	Su	I	32	S	S	S	S	S	42	S	S	S	Su	S
3	Su	S	S	I	S	13	I*	Su	S	Su	S	23	S	S	S	S	Su	33	Su	S	S	Su	I	43	S	I	S	S	Su
4	Su	S	S	S	I	14	S	S	S	S	I	24	S	S	S	Su	S	34	S	S	S	I	S	44	Su	S	S	Su	Su
5	S	S	S	Su	Su	15	S	S	S	I	S	25	S	S	S	S	Su	35	S	S	S	Su	I	45	S	Su	S	Su	Su
6	S	S	S	S	S	16	S	S	S	Su	I	26	S	I**	S	S	Su	36	Su	S	S	S	I	46	S	S	S	Su	S
7	S	S	S	S	S	17	Su	S	S	S	I	27	Su	S	S	S	Su	37	S	S	S	Su	I	47	Su	S	S	Su	I
8	S	S	S	Su	I	18	S	S	S	S	S	28	S	S	S	Su	I	38	S	Su	S	Su	Su	48	S	I	S	Su	S
9	S	S	S	S	S	19	S	Su	Su	I	Su	29	Su	S	S	S	S	39	S	S	I***	S	Su	49	S	S	S	Su	Su
10	S	S	S	Su	I	20	Su	S	S	Su	Su	30	S	S	S	Su	S	40	Su	S	S	Su	I	50	S	S	S	S	Su

Measurements						
	Sex	TL	T	HF	E	grams
A	♂	167	72	20	17	16.1
B	[illegible]	151	51	18	17	20.7
C	♀	157	57	29	14	30.5
D	♀	150	63	19	15	18.7
	♀	154	61	20	15	17.5

I* – flea! in stomach

I** – larvae of lepidoptera

I*** – ant

other insects

[illegible] *

grasshopper

empty → ♀ = 18.6 g

→ pregnant fetuses 3L 2R 27 mm (a few days from parturition)

} tissue too broken down for repro. analysis

ecology consulta, Inc.

1-2

STOMACH ANALYS[illegible]TA SHEET

Project 83 Date 14 May Investigator [illegible]

Location T1S, R[illegible]W, S3 NE1/4 Habitat Pinyon Juniper ([illegible]-facing) (B)

Capture Technique [illegible]

Comments [illegible] 6-4-76

Species Eutamias minimus

	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
1	Su					11	Su	-	-			21	Su					31	Su					41	Su	-			
2	Su					12	Su		-			22	I		-			32	Su	-				42	I				
3	Su					13	Su	-				23	Su					33	I					43	S				
4	Su					14	Su					24	Su					34	S					44	Su		-		
5	S					15	Su					25	Su					35	Su					45	S				
6	Su					16	Su					26	Su					36	Su					46	Su				
7	S					17	Su					27	Su					37	I					47	S				
8	Su					18	Su					28	Su					38	Su					48	Su				
9	S					19	Su					29	Su					39	Su					49	Su				
10	Su		-			20	Su					30	I		-			40	S					50	Su				

Measurements						
	Sex	TL	T	HF	E	grams
A	[illegible]	[illegible]	42	29	11	[illegible]
B	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]
C	-		[illegible]	[illegible]	12	[illegible]
D						
E						

- juvenile? empty stomach

empty -

empty. nulliparous

33.05.221

ecology consultants, inc.

STOMACH ANALYSIS DATA SHEET

Project [illegible] Date [illegible] Investigator [illegible]

Location T15, R90W, S33, NE¼ Habitat Pinyon juniper (scrub [illegible])

Capture Technique Snap trap line

Comments [illegible] 6-4-76

Species Peromyscus maniculatus

	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
1	Su			T		11	S	S		I		21	Su	S	[illegible]			31	Su	[illegible]	[illegible]	S		41	I		[illegible]	S	
2	Su			T		12	I	S		T		22	S		[illegible]			32	Su	S	[illegible]	S		42	Su	S	[illegible]	S	
3	S			T		13	Su	Su		I		23	S	S	I			33	Su	Su	T	S		43	Su		[illegible]	S	
4	S			S		14	S	[illegible]	T	T		24	S	Su	I			34	I	S	[illegible]	S		44	I			S	
5	I		[illegible]	S		15	S			I		25	S	Su	[illegible]			35	S	S	[illegible]	I		45	Su			T	
6	[illegible]			T		16	S	[illegible]		S		26	[illegible]	S				36	Su	[illegible]		T		46	S			[illegible]	
7	[illegible]	S		I		17	Su	S		S		27	S	Su				37	S	Su		I		47	S	[illegible]	T	I	
8	Su	T		[illegible]		18	Su	T		I		28	T	Su				38	S	I	T	I		48	Su	[illegible]		I	
9	I			S		19	[illegible]	S	[illegible]	I		29	Su	Su	I			39	Su			I		49	Su			I	
10	S	[illegible]		T		20	I	I	[illegible]	I		30	Su	Su				40	I	Su	[illegible]	I		50	Su	Su	[illegible]	I	

Measurements						
	Sex	TL	T	HF	E	grams
A	[illegible]	[illegible]	57	[illegible]	17	[illegible]
B	[illegible]	[illegible]	54	[illegible]	[illegible]	17.[illegible]
C	[illegible]	[illegible]	[illegible]	17	13	15.0
D	[illegible]	151	71	18	14	18.0

J [illegible]

J [illegible]

J

-> almost entirely insect -

1:[illegible]

P3.C.5.2.2.1

STOMACH ANALYS[illegible]ATA SHEET

Project [illegible] Date 17 Nov. 197[illegible] Investigator [illegible]

Location T[illegible] Habitat [illegible] ([illegible]-facing) C

Capture Technique snap trap line

Comments

Species Peromyscus maniculatus

	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
1	-					11	-	-				21	-	-				31		-				41		-			
2						12						22						32						42					
3						13	-	-				23						33						43					
4	-					14	-	-				24						34	-	-				44					
5	-	-				15	-	-				25		-				35	-	-				45		-			
6	-	-				16	-	-				26		-				36	-	-				46					
7						17	-	-				27	-	-				37	-	-				47					
8	-					18	-	-				28		-				38	-	-				48					
9						19		-				29	-	-				39		-				49					
10						20		-				30						40	-	-				50					

Measurements						
	Sex	TL	T	HF	E	grams
A	[illegible]	[illegible]	[illegible]	[illegible]	16	[illegible]
B	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C						
D						
E						

nulliparous — empty stomach

juvenile empty stomach all found [illegible]

ecology consultants, inc.

83.C.5.2.2.1

STOMACH ANALYSIS DATA SHEET

Project 83 Date 18/19 May 1976 Investigator P[illegible]

Location [illegible] Habitat Upland Sage

Capture Technique snap trap line

Comments bm 6-4-76

Species Eutamias minimus

	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
1	I	Su*	Su	-	S	11	S	Su	Su		S	21	S	Su	Su	-	S	31	S	Su	Su	-	Su	41	S	Su	Su		[illegible]
2	Su	Su	Su	-	Su	12	S	Su	Su		S	22	Su	Su	Su		S	32	Su	Su	Su		Su	42	S	Su	Su		S
3	Su	Su	Su		Su	13	S	Su	Su		S	23	Su	Su	Su		Su	33	S	Su	Su	-	Su	43	Su	Su	Su		S
4	Su	Su	Su		Su	14	S	I	Su		Su	24	Su	I	S	-	S	34	Su	Su	Su		S	44	Su	Su	Su	-	Su
5	Su	Su	Su		Su	15	S	Su	S		S	25	S	Su	S		S	35	S	Su	Su	-	Su	45	S	Su	S	-	S
6	Su	Su	Su		S	16	Su	Su	S		S	26	Su	Su	Su		S	36	I	Su	Su		[illegible]	46	Su	Su	Su	-	S
7	I	Su	Su	-	Su	17	Su	Su	S		Su	27	Su	Su	Su	-	S	37	S	Su	Su		[illegible]	47	Su	Su	S	-	S
8	I	Su	Su		S	18	S	I	S		S	28	S	Su	Su	-	Su	38	S	Su	Su		[illegible]	48	Su	Su	Su	-	S
9	Su	Su	Su		S	19	S	Su	Su		S	29	S	Su	Su	-	Su	39	S	Su	S		[illegible]	49	S	Su	Su	-	Su
10	Su	Su	I		S	20	S	Su	Su		S	30	S	Su	Su	-	S	40	S	Su	Su	-	S	50	S	Su	Su	-	Su

Measurements						
	Sex	TL	T	HF	E	grams
A	♂	195	83	28	14	[illegible]
B	♂	195	85	29	15	34.9
C	♀	204	92	29	12	33.5
D	♀	[illegible]	[illegible]	[illegible]	13	[illegible]
[illegible]	♂	[illegible]	[illegible]	[illegible]	14	23.7

← (Stomach mostly empty)

← lactating, scars gone

– Juvenile (empty stomach) → {♂ 195 87 28 15 36.0)
empty stomach

I* – more lepidoptera larvae

Su*$_{B+C}$ – yellow flower petals –

I – beetle [illegible] –

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STOMACH ANALYSI[illegible]A SHEET

Project 83

Date -5, 20 [illegible]

Investigator P[illegible]

Location T2S, R105W, S22, NW¼

Habitat [illegible] E

Capture Technique [illegible]

Comments bm 6-4-76

Species Eutamias minimus

	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
1	S	[illegible]	—			11	Su	I	—			21	S	[illegible]	—			31	S	[illegible]	—			41	S	[illegible]	—		
2	[illegible]	[illegible]	—			12	S	[illegible]	—			22	Su	[illegible]	—			32	S	[illegible]	—			42	S	[illegible]	—		
3	[illegible]					13	S	[illegible]	—			23	S	[illegible]	—			33	Su	[illegible]	—			43	S	[illegible]	—		
4	[illegible]		—			14	S	[illegible]	—			24	S	[illegible]	—			34	Su	I	—			44	S	[illegible]	—		
5	[illegible]		—			15	S	[illegible]	—			25	S	[illegible]	—			35	Su	[illegible]	—			45	S	[illegible]	—		
6	[illegible]		—			16	S	[illegible]	—			26	S	[illegible]	—			36	Su	[illegible]	—			46	S	[illegible]			
7	S		—			17	Su		—			27	S	[illegible]	—			37	S	[illegible]	—			47	Su	[illegible]			
8	[illegible]	[illegible]				18	S	[illegible]	—			28	S	[illegible]	—			38	S	[illegible]	—			48	Su	[illegible]			
9	S	[illegible]	—			19	Su	[illegible]	—			29	S	[illegible]	—			39	S	[illegible]	—			49	S	[illegible]			
10	S		—			20	—	[illegible]	—			30	S	I	—			40	S	[illegible]	—			50	S	[illegible]			

Measurements						
	Sex	TL	T	HF	E	grams
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
B	♀	[illegible]	[illegible]	28	13	40.5
C	♀	117	80	29	14	29.2
D						
E						

I - larvae ?

→ pregnant 6 fetuses 3R3L 15mm

→ pregnant 6 fetuses 4R2L stomach empty 20mm

83.C.5

ecology consultants, Inc.

Log L

STOMACH ANALYSIS DATA SHEET

Project______ Date______ Investigator [illegible]

Location [illegible] R100W, S22, NW¼ Habitat [illegible]

Capture Technique [illegible]

Comments [illegible] 6-4-76

Species [illegible]

	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
1	-	Su		S	Su	11	S	Su		Su	Su	21	S	S	S	S	S	31	Su	S	[illegible]	Su	S	41	S	Su	[illegible]	Su	Su
2	[illegible]	S	[illegible]	S	[illegible]	12	Su	Su		S	S	22	S	Su	[illegible]	S	Su	32	S	S		[illegible]	S	42	S	Su	S	V-S	S
3	[illegible]	Su	[illegible]	Su	S	13	S	S	[illegible]	Su	S	23	S	S	S	S	S	33	S	S		Su	S	43	S	Su	[illegible]	S	Su
4	-	Su		Su	Su	14	S	S	[illegible]	[illegible]	S	24	S	S	S	S	S	34	S	S	[illegible]	Su	Su	44	Su	[illegible]	S	S	Su
5	S	S	-	[illegible]	[illegible]	15	S	S	S	S	Su	25	S	S	S	Su	Su	35	S	S	[illegible]	S	S	45	S	S	[illegible]	S	Su
6	S	S	-		[illegible]	16	S	Su	S	S	S	26	S	Su	[illegible]	Su	Su	36	Vh	Su	[illegible]	S	Su	46	S	Su	-	Su	[illegible]
7	[illegible]	Su	[illegible]		[illegible]	17	S	Su	[illegible]	Su	S	27	Su	S	[illegible]	S	Su	37	S	S	[illegible]	Su	Su	47	Su	[illegible]	[illegible]	S	S
8	Su	S	[illegible]	Su	[illegible]	18	S	Su	S	S	Su	28	S	S	S	S	Su	38	S	S	[illegible]	S	S	48	S	S	S	Su	Su
9	[illegible]	Su	[illegible]	S	[illegible]	19	S	S	S	Su	Su	29	S	Su	S	S	S	39	S	S		Su	Su	49	S	S	S	S	S
10	[illegible]	Su	[illegible]	Su	S	20	S	S	S	S	S	30	S	S	S	Su	S	40	S	Su	[illegible]	S	S	50	S	S	S	Su	S

Measurements

	Sex	TL	T	HF	E	grams
A	♂	141	[illegible]	19	14	[illegible]
B	♂	[illegible]	[illegible]	20	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]	19	15	[illegible]
D	[illegible]	[illegible]	[illegible]	[illegible]	16	[illegible]
E	♂	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

lactating Scars 4R 2L fetus [illegible], 3R 3L

♀ 152-70-19-15 = 24.7 g 5mm

♂ 160-66-20-16 = 23.4, [illegible]

← (empty, nulliparous) ♀ 159-75-19-17 = 19.3 g (empty)

Scar - 3R 0L recent
4 L old.

ecology consulta, Inc.

81

STOMACH ANALYS ATA SHEET

Project 83 Date 15 May 19 Investigator Reyes

Location T2S, R10W, S3, SE¼ Habitat ASPEN G

Capture Technique snap trap line

Comments [illegible] 6-4-76

Species Microtus longicaudus

	A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E		A	B	C	D	E
1	Sn					11	Sn					21	S					31	Sn					41	Sn				
2	Sn					12	S					22	S					32	S					42	Sn				
3	Sn					13	S					23	S					33	Sn					43	Sn				
4	Sn					14	S					24	S					34	Sn					44	Sn				
5	Sn					15	Sn					25	Sn					35	Sn					45	Sn				
6	Sn					16	S					26	S					36	Sn					46	S				
7	Sn					17	Sn					27	S					37	Sn					47	Sn				
8	Sn					18	S					28	Sn					38	Sn					48	Sn				
9	S					19	S					29	S					39	Sn					49	Sn				
10	Sn					20	S					30	S					40	Sn					50	Sn				

Measurements						
	Sex	TL	T	HF	E	grams
A	♂	167	61	19	13	24.0g - (pretty empty)
B						
C						
D						
E						

83.C.5.221

ecology consultants, Inc.

PF

HAVAHART MAMMAL LIVE TRAP FIELD DATA SHEET

Project: 83 Location: Rio Blanco Date: May, 76

Date, Time Traps set/baited: 18 May 76 Trap Night: 1

Date, Time Traps checked: 19 May 76 Checked By: Macgregor

Temp.: Max: — Min: — % Cloud Cover: — Precip.: —

NOTE: (Diagram trap locations on back of this sheet with habitat notation for each location.)

bem 6-2-76

Trap #/ Size	Bait/ Lure	Rebaited/w	Species	Tag/Toe Clip #	Age Class	Sex
1 (S)*						
2 (M)						
3 (M)	No	Captures				
4 (M)						
5 (L)						
6 (L)						
7 ( )						
8 ( )						
9 ( )						
10 ( )						
11 ( )						
12 ( )						
13 ( )						
14 ( )						
15 ( )						
16 ( )						
17 ( )						
18 ( )						
19 ( )						
20 ( )						
21 ( )						
22 ( )						
23 ( )						
24 ( )						
25 ( )						

*Trap Size
5x5x18 = S
7x7x30 = M
11x13x42 = L

Comments/Remarks:

HAVAHART MAMMAL LIVE TRAP FIELD DATA SHEET

Project: 83 Location: Rio BLANCO Date: May 7

Date, Time Traps set/baited: 19 May Trap Night: 2

Date, Time Traps checked: 20 May Checked By: Macgregor

Temp.: Max: — Min: — % Cloud Cover: — Precip.: —

NOTE: (Diagram trap locations on back of this sheet with habitat notation for each location.)

bm 6-2-76

Trap #/ Size	Bait/ Lure	Rebaited/w	Species	Tag/Toe Clip #	Age Class	Se
1 (S)*						
2 (M)						
3 (M)	No Captures					
4 (M)						
5 (L)						
6 (L)						
7 ( )						
8 ( )						
9 ( )						
10 ( )						
11 ( )						
12 ( )						
13 ( )						
14 ( )						
15 ( )						
16 ( )						
17 ( )						
18 ( )						
19 ( )						
20 ( )						
21 ( )						
22 ( )						
23 ( )						
24 ( )						
25 ( )						

*Trap Size
5x5x18 = S
7x7x30 = M
11x13x42 = L

Comments/Remarks:

2.3.4 Large Mammals

2.3.4.3 Results

2.3.4.3.1 Aerial Surveys

Mule deer aerial surveys were conducted during 3 days in March and 2 days in April 1976 (Table 2.3-27). Totals of 215, 184, 609, 790 and 452 deer were observed for each census date, respectively (Table 2.3-27). Approximately 91% of the deer were observed east, northeast and southeast of the tract. Of this total, one-half were observed on Transects 3, 4 and 5 which originate on Black Sulphur Creek, pass through 84 Mesa, and terminate at Big Duck Creek. Distribution of deer relative to 84 Mesa were as follows: 65% were observed off 84 Mesa, 16% on 84 Mesa and 18% along breaks associated with drainages of 84 Mesa. A large number of deer located off 84 Mesa were observed either in Yellow Creek or Ryan Gulch drainages, presumably feeding. These animals probably seek more dense cover (i.e., pinyon-juniper) for bedding down during daylight hours. This type of required cover is available on ridges and in ravines adjacent to the feeding areas and in areas away from the immediate vicinity of the drainage basins.

Most deer were observed well to the east of the tract. Highest concentrations were noted during early morning and late evening hours, where they were feeding in drainages. They dispersed to loafing or bedding areas during mid-day. As censuses proceed into early and late April, more individuals were observed west of the tract (Table 2.3-28), indicating either some movement from east to west as snow depths decreased, or other deer moving in from adjacent areas.

The greatest numbers of deer were observed during the 29 March and 8 April censuses, when 609 and 790 deer were observed, respectively. The least number was observed during the 17 March 1976 census, when 184 deer were observed. Only 5% of the deer were observed on tract, with the greatest number seen during the 25 April census. The paucity of deer west of Tract C-a and on tract further supports the supposition that prime wintering habitat lies east of Tract C-a, with Yellow Creek drainage serving as a north-south boundary. This indicates that a shift to the east would probably occur when severe winters occur and a shift westward during mild winters. In either case, Tract C-a serves as a transition zone for migration to and from winter and summer ranges.

2.3.4.3.2 Migration Program

Both aerial censuses and road track counts were conducted

2.3.3.5

Small Mammal Raw Data

Table 2.3-27. Mule deer aerial census counts for RBOSP, Spring 1976.

		Date Aerial Census						
	Transect	3-8-76	3-17-76	3-29-76	4-8-76	4-25-76	Total	$\bar{x}$ (SD)
East	1	66	13	51	46	22	198	39.6 (21.7)
	2	10	10	50	50	9	129	25.8 (22.0)
	3	28	32	167	111	63	401	80.2 (58.8)
	4	15	31	41	182	90	359	71.8 (67.6)
	5	15	7	41	121	83	267	53.4 (48.0)
	6	10	12	30	36	68	156	31.2 (23.4)
	7	20	7	49	26	4	106	21.2 (18.0)
	8	15	12	64	47	4	142	24.8 (21.3)
	9	--	23	25	60	15	123	24.6 (22.0)
	10	12	15	26	13	7	73	14.6 (7.0)
	11	22	8	10	65	3	108	21.6 (25.2)
	Total East of Tract - 2,062 Total By Percent - 91%							
Tract	12	2	1	38	--	--	41	8.2 (16.7)
	13	--	13	2	10	10	35	7.0 (5.7)
	14	--	--	15	18	3	36	7.2 (8.6)
	Total On Tract - 112 Total By Percent - 5%							
West	15	--	--	--	4	49	53	10.6 (21.5)
	16	--	--	--	1	18	19	3.8 (7.9)
	17	--	--	--	--	4	4	.8 (1.8)
	18	--	--	--	--	--	--	--- (----)
	Total West of Tract - 76 Total By Percent - 4%							
	GRAND TOTAL	215	184	609	790	452	2,250	

Table 2.3-28. Number of mule deer observed, by transect, during migration study aerial census 20 April through 3 May 1976 for RBOSP.

	East of Tract						Tract		West of Tract							
	Transect Number															
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	Total	$\bar{x}$	SD
April 20, 1976	52	119	86	4	0	0	22	0	0	0	22	0	0	331	23.5	38.8
April 22, 1976	0	58	23	0	18	0	8	26	22	16	11	0	0	182	14.0	16.5
April 24, 1976	34	106	83	9	0	4	23	24	10	69	2	0	0	364	28.6	35.5
April 27, 1976	65	22	83	2	0	8	53	26	0	45	0	0	0	304	23.4	29.0
April 29, 1976	11	104	21	5	6	0	21	24	10	50	7	0	0	269	20.0	28.8
May 1, 1976	41	75	77	0	3	0	28	8	14	43	13	0	0	302	23.2	27.8
May 3, 1976	4	23	42	7	1	20	12	0	36	23	58	0	0	226	17.4	18.6
Total By Transect	207	507	415	49	32	32	167	108	92	246	123	0	0	1,978	152.2	157.9
Σ =	207	507	415	49	32	32	167	108	92	246	123	0	0	1,978		
$\bar{x}$ =	30	72	59	4	4	5	24	15	13	35	16	0	0	282.6		
SD =	25	40	30	3	7	8	15	12	13	23	20	0	0	62.3		

between 21 April and 2 May to determine general patterns of mule deer migration and distribution in the study area. Criteria used in selecting this 2-week period included past, present and predicted future weather conditions, deer behavioral patterns (herding), field observations of the big game biologist, and input from the Colorado Division of Wildlife.

A total of 1,122 track counts ($\bar{x}$=224, SD 86.5) was made during five censuses, ranging from 345 on 28 April 1976, to 132 observed on 23 April 1976 ($\bar{x}$=224, SD 86.5) (Table 2.3-29). An average of 64% of the tracks indicated a westward movement (toward the tract), with the remaining 36% indicating an eastward movement.

The greatest concentration of tracks was observed at Mile 8 (84 Ranch), Mile 7 (Stake Springs) and Mile 10 (84 Mesa), while the greatest westward movement was observed at Mile 2 (Stake Springs) (Table 2.3-30). Initially, it appears that the deer utilized protected areas during movement; however, other factors obviously influence spatial distributional patterns.

Aerial censuses were conducted in conjunction with the road track counts, but on alternate days when feasible. A total of 1,978 deer ($\bar{x}$=283, SD 63) was observed on seven different occasions, ranging from 182 deer on 12 April 1976 to 364 on 24 April 1976 (Table 2.3-28). The greatest number of deer observed was on Transects 2, 3, 10, 1, 7 and 11 (Table 2.3-31). Three of these transects (3, 2 and 1) are east of Tract C-a, and three (10, 7 and 11) are on tract. Transects 2 and 3 accounted for 47% of all the deer observed during the seven censuses. This would be expected, since Transect 2 (with 507 deer recorded) passes directly over Yellow Creek, a feeding area for mule deer, and Transect 3 (with 415 deer recorded), traverses the breaks east of 84 Mesa, abruptly ending at Yellow Creek.

Deer were observed in greater numbers east of Tract C-a. No deer were recorded for Transects 12 and 13, which lie well west of Tract C-a in the Cathedral Bluffs area. The absence of deer in this area probably indicated a lack of available forage due to the snow cover.

Since these two studies were conducted more or less simultaneously, a correlation coefficient (r^2) was run between number of deer observed during aerial censuses and number of tracks recorded during road counts. The results of this test showed no significant correlation between the dependent and independent variables (r=.71; $r_{.05,3}$=.805). Only aerial transects which traverse the track count route and data which were collected on alternate days were used in this test. If

Table 2.3-29. Number of mule deer tracks crossing the survey road east of Tract C-a from 21 April through 2 May 1976, RBOSP (by date).

		General Direction of Movement				
Date	Total Tracks	/West	%	East	% /	Net Number of Tracks Moving Toward Tract
April 21, 1976	252	166	66	86	34	80
April 23, 1976	132	84	64	48	36	36
April 28, 1976	345	209	61	136	39	73
April 30, 1976	149	100	67	49	33	51
May 2, 1976	244	151	62	93	38	58
Total	1,122	710	63	412	37	298

Table 2.3-30 Number of mule deer tracks crossing the dirt road surveyed east of Tract C-a during 21 April through 2 May 1976, RBOSP (by mile marker).

Mile Interval	Total Tracts Recorded	General Direction of Movement West	%	East	%	Net Number of Tracks Moving Toward Tract C-a
Mile 1 (Reigle Ranch)	57	35	61	22	39	13
Mile 2 (Stake Springs)	39	35	90	4	10	31
Mile 3 (North Stake Springs)	41	27	66	14	34	13
Mile 4 (North Stake Springs)	95	57	60	38	40	19
Mile 5 (North Stake Springs)	47	33	70	14	30	19
Mile 6 (North Stake Springs)	76	46	61	30	39	16
Mile 7 (North Stake Springs)	136	88	65	48	35	40
Mile 8 (84 Ranch)	251	134	53	117	47	17
Mile 9 (84 Mesa)	102	82	80	20	20	62
Mile 10 (84 Mesa)	128	85	66	43	34	42
Mile 11 (84 Mesa)	21	16	76	5	24	11
Mile 12 (84 Mesa)	49	39	80	10	20	29
Mile 13 (Duck Creek)	15	12	80	3	20	9
Mile 14 (Junction of Little & Big Duck Creek)	65	38	59	27	41	11

Table 2.3-31. Aerial census routes for determining migration routes of mule deer for Spring 1976, RBOSP.

		Date of Aerial Census									
	Transect	4-20-76	4-22-76	4-24-76	4-27-76	4-29-76	5-1-76	5-3-76	Total By Transect	$\bar{x}$	SD
	1	52	0	34	65	11	41	4	207	29.6	(25.1)
	2	119	58	106	22	104	75	23	507	72.4	(39.8)
	3	86	23	83	83	21	77	42	415	59.3	(29.5)
East	4	26	0	9	2	5	--	7	49	7.0	(9.1)
	5	4	18	0	0	6	3	1	32	4.6	(6.3)
	6	--	0	4	8	--	--	20	32	4.6	(7.5)
Tract	7	22	8	23	53	21	28	12	167	23.9	(14.6)
	8	--	26	24	26	24	8	--	108	15.4	(12.3)
	9	--	22	10	--	10	14	36	92	13.1	(12.7)
West	10	--	16	69	45	50	43	23	246	35.1	(23.4)
	11	22	11	2	--	17	13	58	123	17.6	(19.5)
	12	--	--	--	--	--	--	--	--	--	--

two days lapsed between samples, the data were not included in the testing. Although the programs were conducted on alternate days, thereby influencing r^2, it appears that a great deal of variability exists in the day-to-day movement of the deer. Furthermore, it appears that the major migration either had occurred or was still to occur. Since so many factors influence herd migration, and our study period included only a 2-week period, the data may not reflect the major migration period.

2.3.4.3.3 Feral Horses

Feral horse aerial censuses were conducted on 8, 17 and 29 March and 8 and 25 May. A total of 304 horses ($\bar{x}$=61, SD 35) was observed, with the greatest number counted during the 25 April census, when 115 were counted and recorded (Table 2.3-32). Of the 304 total, 40% were observed west of the tract, 30% on tract and 30% east of the tract. The greatest number of horses observed on any one transect was 71, recorded on Transect 14 which is located on the west side of Tract C-a.

2.3.4.3.4 Elk

Aerial censuses for elk were conducted on 8, 17 and 29 March and 8 and 25 May 1976 in conjunction with mule deer and livestock censuses. A total of 29 elk was observed during all censuses, with 13 being observed on Transect 18 during the 8 April 1976 census (Table 2.3-32). All of the elk were observed in the Cathedral Bluffs area as in past censuses. The discrepancy in counts reflects behavorial patterns (bedding) rather than presence of different herds. Numerous opportunistic sightings have been made in the mixed brush and Douglas-fir/aspen communities.

Table 2.3-32. Number of elk and feral horses observed during aerial surveys for RBOSP, Spring 1976.

Date	Elk	Feral Horses
3-08-76	7	36
3-17-76	12	50
3-29-76	7	29
4-08-76	13	74
4-25-76	0	115
Total	39	304

2.3.4.5

Large Mammal Raw Data

LARGE MAMMALS

File No. 83C6.6.3.1. Fi

1 of 1

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM

Proj/Study 83/61 Date Flown 8 March '76 Species Feral Horse Survey Area [illegible]

Observers: R F CL Kling L R Ph Kennedy Pilot/Aircraft Len Faur / Cessna 20

Start 0736 Finish 1007 Ave. Indicated Air Speed 80-85 mph Est. Altitude 150

Counting Conditions: Ground Cover excellent Light excellent Air excellent

Weather: Temp. 10°/20°F Wind 0/0 Cloud Cover 0/0 Analyst RK, CLK QA Check bm 3-24

Observations				Location	Notes and Comments
~~M~~ adult	~~F~~	JUV	U	Transect number	
	7			9 S. of Duck Creek 84 mesa	dark: 3 large dark 1 sorrel 3 bay
	8	1		16 N part of Landing Strip Ridge	Black 1 large 1 grey 6 dark 1 big whi
			4	Dry Fork	bottomland sagebrush type
			4	18 ✓ top of ridge at start	2 sorrel 2 black
	7			4 84 mesa	4 sorrel, 1 grey, 2 bay - sagebr
	5			10 84 mesa - south of Big Duck Creek	2 black; 3 sorrel
	27	1	8		

Total Animals Counted: 36 ✓

Animal Distribution: scattered in small bunches NE + SW of Tract.

File No. 83C6.1.3.2.2

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1 of 1 PC

Proj/Study 83/61 Date Flown 17 March 76 Species Feral Horse Survey Area RBOSP

Observers: RF C L King L R P L Kennedy Pilot/Aircraft Len Pauer / Cessna 206

Start 0643 Finish 0917 Ave. Indicated Air Speed 80 to 85 Est. Altitude 100-200'

Counting Conditions: Ground Cover poor Light poor Air excellent

Weather: Temp. 30/35 Wind 1/1 Cloud Cover 3/5 Analyst PLK, CLK QA Check bew 4-7-76

Observations ~~M~~ ~~F~~ Adult		JUV	U	Location Transect		Notes and Comments
			8	4	84 Mesa near Duck Creek	
			1	9	N of Ryan Gulch	
6			3	11	84 mesa S of Duck Creek	1 lg Gray 3 lg black 2 lg bays.
3				12	Wolf Ridge	P-J type
7				13	by Pipeline	3 dark 2 white 2 sorrel
			10	14	Bald Eagle Ridge	P-J + brush 3 white 3 black 3 sorrel
			1	15	Dry Fork	bottom
4		2		16	Landing Strip Ridge	Staring slope mixed brush.
						2 juv were dark lg = 1 white 1 sorrel 2 dark
			2	18	Water Gulch	bottomland.
6				8	Wolf ridge	2 black; 4 sorrel
26		2	22			

tal Animals Counted: 50 ✓

mal Distribution: animals south of Tract C-a.

0/060475

File No. 83C6/3.1.2 PE

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1 of 1

j/Study 83/61 Date Flown 29 March 76 Species Feral Horse Survey Area RBOSP

Observers: R F CL Kling L R PL Kennedy Pilot/Aircraft Len Paur / Cessna 206

Start 0641 Finish 0915 Ave. Indicated Air Speed 75-85 Est. Altitude 50-200'

Counting Conditions: Ground Cover poor Light excellent Air excellent

Weather: Temp. 30/25°F Wind 0/1 Cloud Cover 1/1 Analyst PLK CLK QA Check Lmn 5-18-

Observations				Location	Notes and Comments
M	F	JUV	U	transect	
			4	18 S facing Slope of Airplane Ridge.	all were dark color
			8	4 1/4 mile south of North Van Horn Gulch	2 gray, 3 bays, 3 sorrels - sagebrush
			6	6 84 mesa - north of Corral Gulch	1 bay, 2 black, 3 sorrel / sagebrush
			5	14 Dead Eagle Ridge	3 dark, 2 light
			6	north of Dry Fork	2 white, 1 dark, 1 gray, 2 roan, sagebrush/p-j ecotone
					Transcribed late due to field commitments
			29		

Total Animals Counted: 29

Animal Distribution: scattered

File No. 83.C.6.6.3.1.2

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1 of 1

Proj/Study 83/61 Date Flown 8 April 76 Species Feral Horse Survey Area RBOSP

Observers: R F CLKling L R PLKennedy Pilot/Aircraft Len Paul / Cessna 206

Start 0600 Finish 0845 Ave. Indicated Air Speed 75-85 Est. Altitude 150'-200'

Counting Conditions: Ground Cover poor Light excellent Air excellent

Weather: Temp. 32/41°F Wind WC1 Cloud Cover 1/1 Analyst PLK, CLK QA Check bmw 6-8-76

Observations ~~M F~~ adult	JUV	U	Location transect		Notes and Comments
1			9	~¼ mi N of Corral Gulch	Bay
8			16	S facing slope of ridge N of Landing Strip Ridge	mixed brush type Dark = 6 white = 1 Bay = 1
2			1	¾ mile north of pipeline	sagebrush
8			4	north of N. Van Horn Gully	sagebrush; 5 sorrel; 1 dark; 2 gray
5			9	north of Corral Gulch; north of the p-j	sagebrush; 2 sorrel; 2 dark
7			10	south of Duck Creek	2 white; 1 gray; 4 sorrel and bay
8			14	Landing Strip Ridge	3 black; 1 white, 4 sorrel
8				Sagebrush Hill	4 red, 1 gray, 1 dark, 2 roan
4			15	Sagebrush Hill; north of water Gulch	1 white, 2 gray, 1 roan
14				Airplane Ridge	two groups; one of 6 and one of 8 in sagebrush
7			16	Landing Strip Ridge	
2				Dead Pig Ridge	1 red; 1 black
					transcribed late due to field commitments

Total Animals Counted: 74

Animal Distribution: scattered herds

File No. 33 C.6 6. 3 1.2

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1 of 2

/Study 83/61 Date Flown 25 April 76 Species Feral horse Survey Area RBOSP

Observers: R F Welling L R PL Kennedy Pilot/Aircraft L Paur/Cessna 182

Start 0728 Finish 0949 Ave. Indicated Air Speed 75-85 mph Est. Altitude 150-200

Counting Conditions: Ground Cover poor Light fair Air fair

Weather: Temp. 45°/45°F Wind Scale 3 Cloud Cover 2/3 Analyst PLK/CLK QA Check (wm) 6-2-76

Observations				Location		Notes and Comments
	~~M F~~ adult	JUV	U	Transect		
			4	13	road N of pipeline	3 sorrel 1 dark
			5		Dead Eagle Ridge	3 white 1 dark 1 sorrel
				14	Pipeline	4 dark 1 white 2 sorrel 1 bay
	8	1				1 juv = dark
	3	1		15	N Part of Landing Strip	2 white 1 bay
	2				" " " " "	1 white 1 dark
	7				N slope of Landing Strip	2 white 3 dark 1 sorrel 1 bay
	5			16	Water Gulch	1 white 2 dark 1 buckskin 1 sorrel
✓	4	1		17	N of Diamond Hill	2 dark 1 sorrel 1 gray 1 brown juv
	6	1		18	S of Airplane Ridge	-
	2			1	north of the road	1 red, 1 black
					in Section 34 - Hunt Ridge	
	6			5	north of road north of	
					N. Van Horn Gully	
	1			8	west side of road	1 dark - sagebrush
					on 84 mesa that runs	
					north-south for awhile	
	1			9	right where we cross	black - sagebrush - probably
					the main road on 84 mesa	same sighting as on transect 8
	4	1		10	Section 23 - 84 mesa	Adults - 1 dark, 1 sorrel, 2 bay
						sagebrush
	9	2		14	Dead Eagle Ridge	Juveniles - 1 black, 1 red
	8				Landing Strip Ridge	mixed brush
	6				adjacent to sagebrush	3 black, 2 white, 1 gray in
					grid D	p-j/sagebrush
	6			15	north of the met tower	mixed brush - 5 light, 1 dark
	5				ridge south of Box Elder Gulch	p-j/sagebrush
	53	7	9	page total		

Total Animals Counted: 115

Animal Distribution: Southwest of Tract,

130/060175

File No.

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 20/2

Proj/Study 83/61 Date Flown 25 Apr. 76 Species Feral horse Survey Area RBOSF

Observers: RF Ch Kling LR L. Kennedy Pilot/Aircraft L. Paur / Cessna 182

Start 0728 Finish 0949 Ave. Indicated Air Speed 75-85 Est. Altitude

Counting Conditions: Ground Cover Light Air

Weather: Temp. Wind Cloud Cover Analyst QA Check brw 6-2-76

Observations				Location	Notes and Comments
~~M~~ adult	~~F~~	JUV	U	Transect	
	1	1	2	17 Dead Pig Ridge	♀ was gray and white; foal brown
					2 adults - dark and red - mixed brush
			4	road along Spruce Gulch	Len Paur's observation
			4	south-facing slope	mixed brush
				north of KU Gulch	white, light red, red, dark
			4	ridge north of Cross Gulch	sagebrush; 1 red, 2 gray, 1 dark
	1	1	14	page total	

Total Animals Counted: 115

Animal Distribution: Southwest of Tract C-a

File No. 83C6.b:3:1.1

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1 of 1

/Study 83/04 Date Flown 8 March 76 Species Elk Survey Area RBCSP

Observers: Rf CHKling LR PL Kennedy Pilot/Aircraft Len Paur / Cessna 3

Start 0736 Finish 1007 Ave. Indicated Air Speed 80-85 mph Est. Altitude 150 ft

Counting Conditions: Ground Cover excellent Light excellent Air excellent

Weather: Temp. 10/20°F Wind 0/0 Cloud Cover 0/0 Analyst PLK CHK QA Check bm 3-24-

Observations				Location	Notes and Comments
M	F	JUV	U	transect #	
			7	17 N of N Fork Big Duck	2 in bottom 5 on top mixed brush
			7		

Total Animals Counted: 7 ✓

Animal Distribution: one herd.

File No. 536.3.1.2. PF

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1 of 1

Proj/Study 83/04 Date Flown 29 March '76 Species Elk Survey Area RBOSP

Observers: R F C Kling L P L Kennedy Pilot/Aircraft Len Paur / Cessna 206

Start 0841 Finish 0915 Ave. Indicated Air Speed 75-85 Est. Altitude 150-200'

Counting Conditions: Ground Cover poor Light excellent Air excellent

eather: Temp. 30/25°F Wind 0/1 Cloud Cover 1/1 Analyst PLK WLC QA Check lrw 5-18-76

bservations				Location	Notes and Comments
M	F	JUV	U	transect	
			7	14 beginning of transect	P-J and sagebrush.
					transcribed late due to field commitments.
			7		

otal Animals Counted: 7

nimal Distribution: [illegible]

File No. 83.C 6.6.2.1.1

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1 of 1

Proj/Study 83/04 Date Flown 8 April 76 Species Elk Survey Area RBCSP

Observers: R F CLKing L R PLKennedy Pilot/Aircraft Lon Pace / Cessna 2C

Start 0800 Finish 0845 Ave. Indicated Air Speed 75-85 Est. Altitude

Counting Conditions: Ground Cover poor Light excellent Air excellent

Weather: Temp. 32/40°F Wind WC1 Cloud Cover 1/1 Analyst PLK / CLK QA Check bew 6-8-7

Observations				Location	Notes and Comments
M	F	JUV	U		
				transect	
			13	18 in between north	mixed brush
				and south fork of Big	
				Buck Creek	
					transcribed late due to field commitments
			13		

Total Animals Counted: 13

Animal Distribution: –

File No. 83 C.6.6.3.1.1

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM

1 of 1

Proj/Study 83/04 Date Flown 25 April 76 Species elk Survey Area RBOSP

Observers: R F CCKling L PLKennedy Pilot/Aircraft L Pane / Cessna 182

Start 0728 Finish 0949 Ave. Indicated Air Speed 75-85 Est. Altitude 150-200'

Counting Conditions: Ground Cover poor Light fair Air fair

Weather: Temp. 40/45°F Wind Grade 3 Cloud Cover 2/3 Analyst PLK/CCK QA Check bcm 6-2-76

Observations				Location	Notes and Comments
M	F	JUV	U		
					no elk observed this date

Total Animals Counted: NONE

Animal Distribution:

130/[illegible]

File No. 83C6.1.3.1.26 i.

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM

1 of 2

j/Study 83/04 Date Flown 8 March 76 Species Mule deer Survey Area RBOSP

Observers: RF CL Kling LR PL Kennedy Pilot/Aircraft Leu Paur / Cessna 206

Start 0736 Finish 1007 Ave. Indicated Air Speed 80-85 mph Est. Altitude 150-200

Counting Conditions: Ground Cover excellent Light excellent Air excellent

Weather: Temp. 10°/20°F Wind 0/0 Cloud Cover 0/0 Analyst CLK, PLK QA Check bvm 3-24-

Observations				Location	Notes and Comments
M	F	JUV	U	transect #	
					Fresh snow / south facing slopes completely
			7	1 p-j just south of Yellow creek	covered.
					Tracks numerous south of Yellow Creek
			5	1 between Yellow Creek	P/J and Sagebrush
			20	and flat sagebrush	
			7	covered area	
					No tracks on flat sagebrush covered area
			2	North of Pipeline	P/J
			10	top of ridge S of Ryan Gulch	P/J
			2	" " " " " "	–
			3	North of Black Sulfur	P/J
				2	Numerous tracks between Yellow Creek
					and Duck Creek (on 84 mesa)
			7	3 between Van Horn Gully + Duck Creek	P/J
			4	S of Van Horn Gully	Sagebrush
			2	S of Yellow Creek N of Flat area	P/J
			5	end of transect near tower	
			②	4 S of pipeline not counted in total	Marty Clark saw these
				5	Numerous tracks on 84 mesa
					few tracks on Wolf Ridge
			8	~~top~~ of Wagon Road Ridge	Sagebrush
			4	6 84 mesa near water pipeline	Sagebrush
			①	S of Van Horn Gully	Sagebrush Marty saw this one not counted in total
			9	8 S of Stake Springs	P/J type few tracks on Wolf
			2	S of Duck Creek	P/J and Sagebrush
			10	10 road on 84 mesa	Sagebrush
			2	12 84 mesa ~ 1/2 way through	P/J
			109	page total ✓	

Total Animals Counted: 215 ✓

Animal Distribution:

File No.

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 2062

Proj/Study 83/04 Date Flown 8 March 76 Species Mule deer Survey Area RBOS

Observers: R L Pilot/Aircraft

Start Finish Ave. Indicated Air Speed Est. Altitude

Counting Conditions: Ground Cover Light Air

Weather: Temp. Wind Cloud Cover Analyst QA Check

Observations				Location	Notes and Comments
M	F	JUV	U		
				transect number	
				13	Numerous tracks near Big Duck Creek
					Numerous tracks S facing slope of Corral Gulch
			2	1 north of S. Van Horn Gully	p-j
			1	Hunt ridge - section 27	sagebrush
			7	ridge south of Ryan Gulch	p-j
				ridge runs north-south	p-j
			1	2 gully - section 22 Township 2S	p-j/sage ecotone
			6	South of Yellow Creek	sagebrush
			3	north of north Van Horn Gully	p-j
			1	3 south of Duck creek	p-j Len Paul's observation
			9	ridge north of Ryan Gulch	
			1	4 Wagonroad ridge	p-j
			14	South of Duck Creek	p-j
			7	5 south of Wagonroad ridge	
			6	6 ridge south of House Draw	p-j
			13	7 north of North Van Horn Gully	p-j
			2	Stake Springs Draw	
			5	ridge north of Ryan Gulch	p-j Len Paul's observation
			4	8 84 mesa - section 13	p-j/sage ecotone
			2	10 North of Corral Gulch	p-j/sage ecotone
			5	11 north of road on 84 mesa	p-j/sage ecotone
			11	between "A" and "B" gully	p-j
			6	ridge north of Corral Gulch	p-j
			106	page total ✓	

otal Animals Counted: 215 ✓

Animal Distribution: [illegible]

File No. 83C 6.1.3.2.2 PE

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM

1 of 3

Proj/Study 83/09 Date Flown 17 March 76 Species Mule deer Survey Area RBCSP

Observers: RF CLKling LB PLKennedy Pilot/Aircraft Len Paur / Cessna 206

Start 0643 Finish 0917 Ave. Indicated Air Speed 80 85 Est. Altitude 150 200

Counting Conditions: Ground Cover poor Light poor Air excellent

Weather: Temp. 30/35° Wind 1/1 Cloud Cover 3/3 Analyst PLK, CLK QA Check bw 4-7-7

Observations M	F	JUV	U	Location Transect		Notes and Comments
						Harry Coulombe along for QA.
			4	1	84 Mesa	Sage / P-J
			2		breaks S of Yellow Creek	P-J / Sage poor spotting conditions
			3		before Ryan Gulch	Harry saw 2 more Sagebrush type
			1		before Black Sulfur	bottom of draw
						5 mule deer off area to south
			2	2	North of road at start	P/J south facing slope
			6		Ryan Gulch	open area in sagebrush bottom
			2		broken area S of ~~[illegible]~~ Yellow Creek	sagebrush
			2	3	S facing slope of Van Horn Gulley	sagebrush type
			21		S of Ryan Gulch	sagebrush / P-J type
			3		N of Black Sulfur Gulch Road	P-J type south-facing slope
			1	4	Top of Wagon Road Ridge	P-J sagebrush
			3		near Road on Hunk Ridge	sagebrush
			1		N of " " " "	P-J deer had white collar
			2	5	South of Stake Springs	Sagebrush
			3	6	S of Ryan Gulch	P-J sagebrush
			7		Wolf Ridge (FP)	Sagebrush
				7		1 white collared deer + fawn N of census area
			12	8	S of road on 84 Mesa	open sagebrush area (Harry saw 20 add'l)
			3	9	84 mesa near Duck Creek	Sagebrush
			5		84 mesa flat area	Sagebrush
			15		84 mesa N of [illegible]	
			5	10	84 mesa near road	Sagebrush
				11	"B" gully	1 mule deer Harry saw
			1		S of Stake Springs	P-J type.
			1	12	Road to Corral Gulch	
			105		✓	

Total Animals Counted: 184 ✓

Animal Distribution:

File No.

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 2 of 3

Proj/Study 83/04 Date Flown 17 March 76 Species Mule Deer Survey Area RBOSF

Observers: R L Pilot/Aircraft

Start Finish Ave. Indicated Air Speed Est. Altitude

Counting Conditions: Ground Cover Light Air

Weather: Temp. Wind Cloud Cover Analyst QA Check brm 4-7-76

Observations				Location	Notes and Comments
M	F	JUV	U		
				~~Transect~~	
			9	13 Box Elder Gulch	South facing slope P-J type.
			3	1 Hunk ridge - section 27	sagebrush
				2	very light snow cover; tracks have
					probably melted away,
			③	3 ridge north of Duck Creek	p-j [illegible]
			6	along Stick Gully	p-j
			8	4 ridge north of Ryan Gulch	p-j
			1	south of yellow Creek	p-j/sagebrush
			14	south of North Van Horn Gully	sagebrush
			3	1/8 mile north of the herd	p-j/sagebrush
				of 14	
			1	5 north of North Van Horn	was wearing a buff-colored collar
				Gully (84 mesa)	(Ken Paur's observation)
			4	next to road on Yellow	sagebrush
				Creek	
			2	6 ridge adjacent to the	p-j
				transect line south of	
				Ryan Gulch about 1/2 mile	
			1	7 [illegible] ridge	p-j
			6	Ryan Gulch	adjacent to ranch
			5	10 ridge north of Corral Gulch	p-j
1				South of "B" Gully	p-j/sagebrush
			4	1/2 mile south of Duck	sagebrush
				Creek.	
		3	4	11 South of the second	sagebrush
				crossing on the road on 84 mesa	
			71	✓	

Total Animals Counted: [illegible]

nimal Distribution: [illegible]

File No.

3 of 3

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM

j/Study 53/04 Date Flown 17 March 76 Species Mule Deer Survey Area R BOSP

Observers: R L Pilot/Aircraft

Start Finish Ave. Indicated Air Speed Est. Altitude

Counting Conditions: Ground Cover Light Air

Weather: Temp. Wind Cloud Cover Analyst QA Check bm 4-7-7

Observations				Location	Notes and Comments
M	F	JUV	U	Transect	
			4	13. in Corral Gulch	sagebrush
				16	few tracks in this part o
					the study area
				✓	

Total Animals Counted: 184

Animal Distribution:

File No. 83C 6/3.1.2 PF

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1 of 2

Proj/Study 83/04 Date Flown 29 March 76 Species Mule deer Survey Area RBOSP

Observers: R ℓ CLKling L ℓ PL Kennedy Pilot/Aircraft Len Paur / Cessna 206

Start 0641 Finish 0915 Ave. Indicated Air Speed 75-85 Est. Altitude 150-200'

Counting Conditions: Ground Cover poor Light excellent Air excellent

Weather: Temp. 30/25°F Wind 0/1 Cloud Cover 1/1 Analyst PLK CLK QA Check 5-18-76

Observations					Location	Notes and Comments
M	F	JUV	U	transect		
			26	1	S of Yellow Creek	Sage brush / flat area poor ground cover
			23	1	N of Ryan Gulch	" " excellent light
			2		N of road on Black Sulphur	P-J
			1	2	S of Pipeline	P-J
			68	3	84 mesa	sage flat area
			26		S of Ryan Gulch	P-J N facing slope
			35		NE of tower	sagebrush
			16	4	84 mesa S of W.H Gully	sagebrush
			2	5	ridge S of Stake Springs	P-J
			5		1/3 way to top of ridge S of Stake Springs, p-j type	
			18		Top of Wagon Road Ridge	sagebrush
			4	6	Top of ridge by plots	sagebrush
			3		S of Stake Springs	P-J
			46	7	84 mesa	sagebrush
			3		bottom of Stake Springs	sagebrush
			2	8	top of Hunk Ridge	P-J
			25	9	N part of 84 mesa	sagebrush
			1	11	Top of Wolf Ridge	P-J
			2		" " " "	sagebrush
			2		Stake Springs	by pond.
			10	2	road north of Ryan Gulch	p-j
			7		Hunk Ridge southeast of Stuck Gully	p-j/sage transition
			2		section 28 on Hunk Ridge	p-j/sagebrush Len Paur's observation
			10		section [illegible]21 Hunk Ridge	p-j/sagebrush
			20		south of Yellow Creek	p-j/sagebrush
			26	3	north of Yellow Creek	sagebrush
			6		road runs north of Ryan Gulch	sagebrush
			5		Wagon road Ridge	p-j/sagebrush
			336			

Total Animals Counted: ~~592~~ 609

Animal Distribution: mainly north and east of tract

File No.

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 2 of 2

j/Study 83/04 Date Flown 29 March 76 Species Mule deer Survey Area RBOSP

Observers: R L Pilot/Aircraft

Start Finish Ave. Indicated Air Speed Est. Altitude

Counting Conditions: Ground Cover Light Air

Weather: Temp. Wind Cloud Cover Analyst QA Check bm 5-18-

Observations				Location		Notes and Comments
M	F	JUV	U	Transect		
			1	3	north slope of Black Sulphur Creek - p-j	Len Paur's observatio
			9	4	slope east of Yellow Creek	p-j/sagebrush
			11		Yellow Creek (westside)	sagebrush
			5		½ mile south of North Van Horn Gully	sagebrush
			12	5	south of North Van	
					Horn Gully	sagebrush
			4		Hunk Ridge - South of	sagebrush
					Corral Gulch	
			6	6	Corral Gulch	sagebrush
			17 41	6 8	Sagebrush on 84 Mesa 84 mesa - north of road	sagebrush (2 groups - 1 of 18, 1 of 23
			21		south of Duck Creek	sagebrush
			26	10	south of Big Duck Creek	sagebrush
			5	11	South of A gully	sagebrush
			15	12	next to road north	sagebrush /p-j
					of ~~Box Elder~~ Park Gulch	sagebrush. Len Paur's observ
			6		north of A Gully	
			17		north end of transect	sagebrush
			2	13	[redacted] north	
					of A Gully	sagebrush /p-j
			12	14	ridge north of Big	p-j
					Duck Creek	
			3		south of Rees Gully	sagebrush
						Transcribed late due to field commitments
			~~446~~ 213			

Total Animals Counted: ~~572~~ 609

Animal Distribution:

File No. 83.C.6.1.31.1

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM

1 of 3

Proj/Study 83/04 Date Flown 8 April 76 Species Mule deer Survey Area RBOSP

Observers: RF CL Kling LR PL Kennedy Pilot/Aircraft Len Paur/Cessna 206

Start 0600 Finish 0845 Ave. Indicated Air Speed 75-85 Est. Altitude 150-200'

Counting Conditions: Ground Cover poor Light excellent Air excellent

Weather: Temp. 32°/40°F Wind WC1 Cloud Cover 1/1 Analyst PLK, CLK QA Check bmw 6-8-76

Observations				Location		Notes and Comments
M	F	JUV	U	transect		
			13	1	Near road N of Ryan Gulch	Flat area sagebrush
			7		south of Ryan Gulch	sagebrush type
			6	2	bottom of Ryan Gulch	bottomland meadow
			8		North of Ryan Gulch	sagebrush
			26	3	84 mesa	sagebrush
			18		S of Yellow Creek	Flat area N of road.
			37		where transect crosses road	Flat sagebrush
			26		NE of tower	Flat area
			90	4	84 mesa Flat area	sagebrush
			22		S facing slope above Yellow	bedded down
			5		S of V. H. Gully	
			22	5	N of V. H. Gully	Sagebrush
			3		N of road in Corral Gulch	
			42		bottom of Corral Gulch	E of 84 ranch meadow type
			21		between test plot + road	Flat; sagebrush
			16	6	between V. H Gully + Duck Creek	sagebrush
			4	7	84 Mesa N. of Corral Gulch	sagebrush
			22		end of transect	flat area, sagebrush.
			5	8	Start of transect	" " "
			3		sagebrush 84 mesa	
			4	9	bottom of Gully	
			8		84 mesa S of Duck Creek	sagebrush
			10		84 mesa near road	Sagebrush
			19		south of road on 84 mesa on flat	area sagebrush
			2		south of road	
			4		Seep Springs N [illegible] area + S of small gully	sagebrush
			41	11	84 mesa S of old corral	sagebrush
			2	13	N of Big Duck Creek	sagebrush
			5		S of pipeline near road	sagebrush
			4	15	top of Sagebrush Hill	
			489		page total ✓	

otal Animals Counted: 790

imal Distribution: 84 mesa heavily used

0/060175

File No.__________

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM

28/3

/Study 83/04 Date Flown 8 April 76 Species Mule Deer Survey Area RBOSP

Observers: R______ L______ Pilot/Aircraft______

Start______ Finish______ Ave. Indicated Air Speed______ Est. Altitude______

Counting Conditions: Ground Cover______ Light______ Air______

Weather: Temp.______ Wind______ Cloud Cover______ Analyst______ QA Check brw 6-8-76

Observations				Location		Notes and Comments
M	F	JUV	U	transect		
			17	1	3/4 mile north of pipeline	sagebrush
			6		north of Ryan Gulch	p-j
			9		north of Black Sulphur Creek	p-j
			4	2	north of road on Hunk Ridge	sagebrush
			5		south of S. Van Horn Gulch	sagebrush
			27		South of Yellow Creek	sagebrush flats
			4	3	north of road on Hunk Ridge	sagebrush /p-j ecotone
			60	4	Yellow Creek	This is not the exact count
			5		south of N. Van Horn Gulch	sagebrush
			33	5	Yellow Creek	This count probably overlaps with the deer seen in transect # 4
			7	6	Wagonroad Ridge	p-j
			1		Wolf Ridge - south of Kling Gulch	sagebrush /p-j
			7		Corral Gulch	
			5		84 mesa - east of road; 1/2 mile north of Corral Gulch	sagebrush
			35	8	scattered within a 1/2 mile section - 84 mesa - north of the road	sagebrush; 19 of these deer were in a sagebrush /p-j ecotone
			4		1/2 mile south Buck Creek	
			4	9	84 mesa road	
			9		north of Corral Gulch	p-j /sagebrush
			13	10	north of road on 84 mesa	p-j /sagebrush ecotone
			20	11	north of 84 mesa road	running in p-j /sagebrush ecoto
			4		north of p-j stands that are north of Corral Gulch	p-j /sagebrush ecotone
			279	page total ✓		

Total Animals Counted: 790

Animal Distribution: 84 mesa heavily used

130/060175

File No. ____________

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 3of3

Proj/Study 83/04 Date Flown 8April 76 Species Mule Deer Survey Area RBOSP

Observers: R ____________ L ____________ Pilot/Aircraft ____________

Start ________ Finish ________ Ave. Indicated Air Speed ________ Est. Altitude ________

Counting Conditions: Ground Cover ____________ Light ____________ Air ____________

Weather: Temp. ______ Wind ______ Cloud Cover ______ Analyst ______ QA Check bw 6-8-76

Observations					Location	Notes and Comments
M	F	JUV	U	transect		
			④	12	north of Little Duck Creek	off census area
			3	13	north of Wolf Ridge	
			2	14	Landing Strip Ridge	
			5		north of Box Elder Gulch	p-j /sagebrush
			4		South of Corral Gulch	p-j /sagebrush ecotone
			3		Sagebrush Hill	Len Rous's observation
			1		South of Live Eagle Gulch	sagebrush
			3		north end of study area	p-j /sagebrush ecotone
			1	16	Dead Eagle Ridge	mixed brush
						transcribed late due to field commitments
			22		page total ✓	

Total Animals Counted: 790

Animal Distribution: Shows heavily used

130/060175

File No. 83 C 6.1.3.1.1

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1 of 3

Proj/Study 83/04 Date Flown 25 April 76 Species mule deer Survey Area RBOSP

Observers: R F C. Kling L R R. Kennedy Pilot/Aircraft L Paw/Cessna 182

Start 0728 Finish 0949 Ave. Indicated Air Speed 75-85 mph Est. Altitude 150-200

Counting Conditions: Ground Cover poor Light fair Air fair

Weather: Temp 45°/45°F Wind S ~ 1-3 Cloud Cover 2/3 Analyst CK/RK QA Check Lum 6-2-76

Observations				Location		Notes and Comments
M	F	JUV	U	transect		
			1	1	N of Black Sulfur	P-J Type
			2	2	N of Black Sulfur	top of ridge P-J/Sage Interface
			6	3	S of Yellow Creek	sage flat
			8		S of Road	
			8		along Road	Sagebrush
			13		N of road Wagon Road	sagebrush
			18	5	Corral Gulch	meadow
			1		Near Tower	
			14		near end	sagebrush
			3	6	Corral Gulch	meadow
			18		" "	"
			5		84 mesa slope	
			4	7	S of 84 mesa road	sagebrush
			2	8	water pipeline 84 mesa	
			1	9	N of Corral Gulch	P/J - sage
			6		Stake Springs	P/J
			3	11	ridge S of Stake Springs	Sage - P/J
			3	14	Airplane ridge	Sage
			8	15	N of Big Duck Creek	
			9		Sagebrush Hill	N facing slope mixed brush
			9		N part of landing Strip	
			18	1	east of S. Uanthorn Gully	sagebrush section 15
			2		section 34 just north of road on Hunk Ridge	
			1		½ mile north of Black Sulphur Creek on the second ridge over to the east	p-j
			1	2	Wagon road Ridge - section 16	p-j - bedded down
			164		page total	

Total Animals Counted: 452

Animal Distribution: many in meadow east of Tract.

130/060175

File No.

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 20/3

Proj/Study 83/04 Date Flown 25 Apr '76 Species Mule deer Survey Area R Bose

Observers: R L Pilot/Aircraft

Start Finish Ave. Indicated Air Speed Est. Altitude

ounting Conditions: Ground Cover Light Air

eather: Temp. Wind Cloud Cover Analyst QA Check Lum 6-2-76

bservations				Location	Notes and Comments
M	F	JUV	U	transect	
			4	2 Hunk ridge- section 4	Sagebrush
			2	South of yellow Creek	p-j /sagebrush
			20	3 Hunkridge - bottom corner section 33	sagebrush; 1 deer had a white collar
			8	south of road cros-sing Wagon road Ridge	p-j
			40	4 east Stake Springs Draw	
			14	east confluence of Corral Gulch and Stake Springs Draw	
			36	south of yellow Creek	Sagebrush flats; two groups, one of 26 and one of 10
			10	5 yellow Creek	
			29	Corral Gulch	
			2	road south of Corral Gulch	sagebrush
			9	road on Wagonroad Ridge	p-j/sagebrush ecotone
			35	6 Corral Gulch	was not an exact count; maybe 40
			7	84 mesa - 1/2 mile north Corral Gulch	
			2	8 84 mesa - west side of road	
			2	9 84 mesa - 1/2 mile south of road	sagebrush
			220	page total	

Total Animals Counted: 452

Animal Distribution:

130/060125

File No. __________

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM

3 of 3

[illegible]j/Study 83/04 Date Flown 25 April 76 Species Muledeer Survey Area RBOSP

Observers: R __________ L __________ Pilot/Aircraft __________

Start ______ Finish ______ Ave. Indicated Air Speed ______ Est. Altitude ______

Counting Conditions: Ground Cover __________ Light ______ Air ______

Weather: Temp. ____ Wind ____ Cloud Cover ____ Analyst ______ QA Check bm 6-2-76

Observations				Location		Notes and Comments
M	F	JUV	U	Transect		
			6	9	beginning of p-j north of Corral Gulch	p-j /sagebrush
			6	10	84 mesa - section 23	sagebrush
			3	13	by road in sagebrush on 84 mesa ridge between A gully and B gully	p-j /sagebrush ecotone
			7		north of Right Fork Stake Springs Draw	p-j/sagebrush
			9	15	Dead Horse Ridge	mixed brush /p-j ecotone
			14		ridge south of Box Elder Gulch	p-j /sagebrush
			8	16	road on Airplane Ridge	mixed brush /p-j
			2		Dead Pig Ridge	mixed brush
			2		south facing slope - Dead Horse Ridge	mixed brush
			2		draw south of Ree's Gully	sagebrush - Len Paur's observation
			4		north end of transect	mixed brush /p-j
			4	17	Southeast facing slope East Fork Spring Creek	
			68	page total		

Total Animals Counted: 452

Animal Distribution:

File No. 83C6, 3.3.1.1 PF

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1062 Migration Count

Proj/Study 83/04 Date Flown 24 April 76 Species mule deer Survey Area RBOSP

Observers: R F CLKling LF Paur Pilot/Aircraft L Paur / Cessna 182

Start 0617 Finish 0800 Ave. Indicated Air Speed 75-85 Est. Altitude 150-200'

Counting Conditions: Ground Cover poor - no snow Light excellent Air excellent

Weather: Temp. 32/38°F Wind S~1 Cloud Cover 1/1 Analyst crc QA Check

Observations				Location		Notes and Comments
M	F	JUV	U	Transect		
				13		
				12		
			2	11	Sagebrush Hill	
			19	10	Landing Strip Ridge	
			25		Dead Pig Ridge	
			6		Sagebrush Hill	
			14		S of Little Duck	
			10	9	Sagebrush Hill	
			8	8	S of met tower	
			11		near met tower ridge top	
			5		N of Dry Fork	
			1	7	N of Corral Gulch	
			4		N of Corral Gulch	
			12		between A & B Gully	
			6		end of transect sage plot	
			4	6	Duck Creek	
				5		
			9	4	W of Reagle Ranch	
			16	3	E of Lower Benchmark	
			36		Corral Gulch Meadow	
			1		Ryan Gulch	
			27		Ryan Gulch	
			3		S of plots near end	
			25	2	Ryan Gulch bottom	
			46		Yellow Creek	
			35		Yellow Creek	
			3	1	Flat overlook of Breaks	

Total Animals Counted: 364

Animal Distribution:

130/060175

File No.

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM Migration Count

Proj/Study 83/04 Date Flown 24 April 76 Species mule deer Survey Area 2082 RBOSP

Observers: R L Pilot/Aircraft

Start Finish Ave. Indicated Air Speed Est. Altitude

Counting Conditions: Ground Cover Light Air

Weather: Temp. Wind Cloud Cover Analyst QA Check

Observations				Location	Notes and Comments
M	F	JUV	U	Transect	
			26	1 meadow of Ryan Gulch	
			5	" " " "	

Total Animals Counted: 364

Animal Distribution:

130/060175

File No. 5-26. 3.3.1.1 PF

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM Migration 1062

Proj/Study 83/04 Date Flown 22 April 76 Species mule deer Survey Area RBOSP

Observers: R F C L Kling L F L F Pauer Pilot/Aircraft L Pauer / Cessna 182

Start 0609 Finish 0753 Ave. Indicated Air Speed 75-85 Est. Altitude 150-200

Counting Conditions: Ground Cover No snow/poor Light fair Air poor

Weather: Temp. 48/54F Wind 25-30 Cloud Cover 0/1 Analyst CLK QA Check

Observations				Location		Notes and Comments
M	F	JUV	U	transect		
				13		Turbulent air possible mnt lion
				12		
			5	11	Little Duck Creek	
			6		Sagebrush Hill	
			8	10	Airplane Ridge	
			8		N of Big Duck Creek	
			2	9	Dead Horse Ridge	
			10		Sagebrush Hill	
			5		Airplane Ridge	
			5		Landing Strip	
			6	8	near met tower	
			18		" " "	
			2		N of Box Elder	
			2	7	Cabin on 84 mesa	
			6		End of transect	
				6		
			2	5	Corral Gulch	
			11		Corral Gulch	
			5		end of transect	
				4		
			5	3	Wolf Ridge	
			13		" "	
			5		Pipeline	
			10	2	Ryan Gulch	
			11		Yellow Creek	
			14		" "	
			23		" "	
				#1		

Total Animals Counted: 182

Animal Distribution: [illegible] / [illegible] [illegible] than in April flight

130/060175

File No.__________________

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM Migration 2 of 2

j/Study 83/04 Date Flown 20 April 76 Species mule deer Survey Area RBOSP

Observers: R__________ L__________ Pilot/Aircraft__________

Start________ Finish________ Ave. Indicated Air Speed______ Est. Altitude______

Counting Conditions: Ground Cover__________ Light________ Air________

Weather: Temp.____ Wind____ Cloud Cover____ Analyst______ QA Check______

Observations				Location	Notes and Comments
M	F	JUV	U	Transect	
			7	#2 Yellow Creek	
			5	S of Duck Creek	
			10	#1 Yellow Creek	
			8	N of dumps road	
			9	N of pipeline	
			13	Ryan Gulch	
			12	meadow	

Total Animals Counted: 331

Animal Distribution: east of Tract C-a

130/060175

File No. 53C633.1.1

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM Migration 1 of 2

Proj/Study 83/04 Date Flown 20 April 76 Species mule deer Survey Area RBOSP

Observers: RF CL Kling LR LF Paur Pilot/Aircraft L Paur / Cessna 182

Start 0617 Finish 0837 Ave. Indicated Air Speed 75-85 Est. Altitude 150-200

Counting Conditions: Ground Cover No snow/post .. Light good Air excellent

Weather: Temp. 38F/38 Wind 2 Cloud Cover 0/0 Analyst CLK QA Check

M	F	JUV	U	Location	Notes and Comments
				transect	
				13	
				12	
			16	11 Airplane Ridge	
			6	Dead Pig Ridge	
				10	
				9	
				8	
			2	7 Corral Gulch	
			3	Airplane Ridge	
			4	Pipeline	
			13	Pipeline	
				6	
			4	5 84 mesa	
			20	4 Corral Gulch	
			6	4 84 mesa	
			30	3 Corral Gulch	
			6	Corral Gulch	
			12	" "	
			5	Wolf Ridge	
			16	Ryan Gulch	
			5	Near plots	
			12	clearing near road	
			2	2 N of start	
			24	Ryan Gulch	
			33	Yellow Creek	
			40	" "	
			11	" "	

Total Animals Counted: 331

Animal Distribution:

File No. 83C6.2.1.1 PF
1062

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM Migration Count

P[illegible]j/Study 83/04 Date Flown 27 April 76 Species mule deer Survey Area RBOSP
Observers: R F CLKling L F LF Pauer Pilot/Aircraft L Pauer / Cessna 182
Start 0648 Finish 0835 Ave. Indicated Air Speed 75-85 Est. Altitude 150-200
Counting Conditions: Ground Cover excellent fresh snow Light excellent Air excellent
Weather: Temp. 21/25°F Wind E~1 Cloud Cover 0/0 Analyst CLK QA Check

Observations				Location		Notes and Comments
M	F	JUV	U	Transect		
				13		fresh snow this morning!
						tracks bottom of N Frk Big Duck Creek
				12		Tracks W of Corral Gulch Area
						tracks on South facing slopes near
						Big Duck Creek
				11		
			7	10	Airplane Ridge	
			8		Airplane Ridge	
			4		Dead Pig Ridge	top
			5		" " "	S facing Slope
			4		Sagebrush Hill	N facing Slope
			4		Dead Horse Ridge	S " "
			17		Second gullys of end	
				9		
			13	8	near met tower	
			2		" " "	
			3		N of met tower	
			8		S of Corral Gulch	
			7	7	Small gully before Corral	
			14		N of Corral Gulch	
			10		Landing Strip Ridge	
			15		N of Pipeline	
			7	6	bottom S of Tract HQ	Tracks in snow from 84 mesa to Corral Gulch
			1		bottom of Big Duck	
				5		84 mesa had clouds on 5, 4, and part of #3
				4		Tracks in snow above Rogle Ranch
			2		S of Snake Springs	

Total Animals Counted: 301
Animal Distribution:
130/060175

File No.

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 2 of 2 Migration Count

oj/Study 83/04 Date Flown 27 April 76 Species mule deer Survey Area RBOSP

servers: R L Pilot/Aircraft

art Finish Ave. Indicated Air Speed Est. Altitude

unting Conditions: Ground Cover Light Air

ather: Temp. Wind Cloud Cover Analyst QA Check

servations					
F	JUV	U	Transect	Location	Notes and Comments
		43	3	Wolf Ridge	
		22		PlotB near end	
		4		near road	
		14		near end	
		14	2	Ryan Gulch meadow	
		8		Yellow Creek meadow	
		7	1	S of Yellow Creek	
		3		Flat area N of Exclosure	
		12		S of road N of Ryan Gulch	
		8		Ryan Gulch meadow	
		35+		" " "	
			170		

tal Animals Counted: 301

imal Distribution: [illegible]

File No. 83 C 6 2.2.1.1

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM

1062
Migration Counts

/Study 83/01 Date Flown 29 April 76 Species mule deer Survey Area RBOSP

Observers: RF Eckling LF C C Penn Pilot/Aircraft C Penn / Cessna 182

Start 0653 Finish 0838 Ave. Indicated Air Speed 75-85 mph Est. Altitude 150-20

Counting Conditions: Ground Cover poor Light good Air excellent

Weather: Temp. 40/46°F Wind N~2 Cloud Cover 1/1 Analyst ccn QA Check

Observations				Location		Notes and Comments
M	F	JUV	U	Transect		
				13		
				12		
			4	11	S of East Fork Springcreek	
			1		N of Big Duck	
			7		Sagebrush Hill	
			5		Airplane Ridge	
			24	10	Airplane Ridge	
			7		Sagebrush Hill	
			5		Top of Dead Horse Ridge	
			7		N Fork Big Duck	
			6		top of ridge N of	
			1		Little Duck	
			3	9	Big Duck Creek	
			7		Landing Strip Ridge	
			14	8	road S of mit tower	
			10		ridgepoint 1st gully N of Corral	
			2	7	N of Corral Cn Ck	
			6		N of powerline	
			8		by Trout Cr Sign	
			5		sagebrush flat near end	
				6		
			3	5	Stake Springs Meadow	
			3		S of road	
			1	4	W of Reagle Ranch	
			4		N of Corral Gulch 84 mi	
			14	3	Ryan Gulch Meadow	
			1		near end.	

Total Animals Counted: 269

Animal Distribution:

File No.__________

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM Migration 2 of 2

Proj/Study 83/04 Date Flown 24 April 76 Species mule deer Survey Area RBOSP

Observers: R__________ L__________ Pilot/Aircraft__________

Start__________ Finish__________ Ave. Indicated Air Speed__________ Est. Altitude__________

Counting Conditions: Ground Cover__________ Light__________ Air__________

Weather: Temp.__________ Wind__________ Cloud Cover__________ Analyst__________ QA Check__________

Observations M	F	JUV	U	Location	Notes and Comments
				Transect	
			4	3 plots near end	
			16	2 Ryan Gulch bottom	
			10	across road	
			15+	S of Yellow Creek	
			16	Yellow Creek meadow	
			10	↓	
			13		
			12		
			5	edge of 84 mesa	
			4	" " " "	
			3	S of U.H. Gully	
			8	1 Plateau S of Yellow Creek	
			3	bottom of Ryan Gulch	

Total Animals Counted: 269

Animal Distribution: —

130/060175

File No. 83 C.6.3.2.1.1P1

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM Migration Count

/Study 83/04 Date Flown 1 May 76 Species mule deer Survey Area 1 of 2 KBOSP

Observers: R ECL Kling L ELF Pane Pilot/Aircraft L Pane / Cessna 182

Start 0625 Finish 0813 Ave. Indicated Air Speed 75-85 Est. Altitude 150-200

Counting Conditions: Ground Cover poor Light excellent Air good

Weather: Temp. 40/35 Wind 5-2 Cloud Cover 0/0 Analyst CLK QA Check CRM 5-4-

Observations				Location	Notes and Comments
M	F.	JUV	U	Transect	
				13	
				12	
			9	11 NFrk Big Duck	
			2	Dead Pig Ridge	
			2	Landing Strip Ridge	
			4	10 " " " N	
			8	Airplane Ridge	
			2	Airplane Ridge	
			5	Dead Pig Ridge	
			4	Sagebrush H.N	
			8	between Rest Lake Duck	
			12	near end of transect	
			7	9 N of Big Duck	
			3	Near pipeline	
			4	" "	
			5	8 Landing Strip Ridge	
			3	N of met tower	
			21	7 North of Corral Gulch	
			3	road up Boxelder	
			2	S of pipeline	
			2	near end sage flat	
				6	
			3	5 84 mesa	
				4	
			19	3 Corral Gulch Meadow	
			15	" " "	
			21	Ryan Gulch Meadow	

Total Animals Counted: 302

Animal Distribution:

File No.

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM migration count 2 of 2

Proj/Study 83/04 Date Flown 1 May 76 Species mule deer Survey Area RBOSP

Observers: R L Pilot/Aircraft

Start Finish Ave. Indicated Air Speed Est. Altitude

Counting Conditions: Ground Cover Light Air

Weather: Temp. Wind Cloud Cover Analyst QA Check

Observations					Location	Notes and Comments
M	F	JUV	U	transect		
			29	3	end of transect	
			4	2	top of ridge at start	
			4		North of road	
			33		yellow Creek bottom	
			11		" " "	
			23		" " "	
			8	1	S of yellow Creek	
			4		Plateau N of Ryan Gulch	
			5		" " " " " "	
			21		meadow Ryan Gulch	
			3		Top of Wagon Road Ridge	

otal Animals Counted: 302

Animal Distribution:

130/060175

File No. 83C6. 3. 3. 1. 1 PF-1062

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM Migration Movement

I /Study 83/04 Date Flown 3 May 76 Species Mule deer Survey Area RBCSP

Observers: R RF Ch Kling L LC Cf Pauw Pilot/Aircraft LF Pauw/ Cessna 182

Start 0626 Finish 0817 Ave. Indicated Air Speed 75-85 Est. Altitude 150-200

Counting Conditions: Ground Cover poor Light good Air excellent

Weather: Temp. 50/45° Wind sw-2 Cloud Cover 1/1 Analyst CLK QA Check Lm/5 15-76

Observations				Location	Notes and Comments
M	F	JUV	U	Transect	
				13	
				12	
			9	11 N of Little Duck Creek	
			3	N of N Frk Big Duck Creek	
			8	N of N Frk Big Duck Creek	
			6	S facing slope Dead Horse	
			7	Sagebrush Hill	
			4	Dead Pig Ridge	
			5	Dead Pig Ridge	
			14	Top of ridge S of Dead Pig Ridge	
			2	Top of ridge S of Dead Pig Ridge	
			6	10 on Pipeline	
			4	Airplane Ridge	
			1	Dead Pig Ridge	
			5	S of Rees Gully	
			2	N of Rees Gully	
			5	end of transect	
			1	9 Sagebrush Hill	
			8	Airplane Ridge	
			10	Landing Strip Ridge	
			12	Landing Strip Ridge	
			5	S of Landing Strip Ridge	
				8	
			3	7 Cabin on 84 mine	
			6	N of Corral Gulch	
			1	ridgetop S of Boxelder	
			2	at end of transect	

Total Animals Counted: 276

Animal Distribution:

File No. ____________

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 2 of 2

Migration Movement

Proj/Study 83/04 Date Flown 3 May 76 Species Mule deer Survey Area RBOSF

Observers: R ____________ L ____________ Pilot/Aircraft ____________

Start ____________ Finish ____________ Ave. Indicated Air Speed ________ Est. Altitude ________

ounting Conditions: Ground Cover ____________ Light ____________ Air ____________

eather: Temp. ______ Wind ______ Cloud Cover ______ Analyst ____________ QA Check lwm 5-18-76

Observations					Location	Notes and Comments
M	F	JUV	U	transect		
			8	6	S end of transect	
			4		S end of transect	
			6		Corral Gulch bottom	
			1	5	at start of transect	
			7	4	meadow in Ryan Gulch	
			9	3	84 mesa E of lower bench mk	
			3		84 mesa S of lower bench mk	
			4		bottom of Corral Gulch	
			12		Stake Springs	
			1		N of Stake Springs	
			4		S of Stake Springs	
			9		E of Rengle Ranch meadow	
			10	2	S of pipeline	
			3		on pipeline	
			7		near road on Hank Ridge	
			3		84 mesa	
			3	1	Wagon road ridge	
			1		near S end in Sagebrush	
			97			

otal Animals Counted: 226 ✓

mal Distribution: [illegible]

[illegible] 2.3.1.2

LARGE MAMMAL TRACK COUNT FIELD DATA SHEET

Project/Study 8-/04 Date 2 Mar, 76 Observer [illegible] Sheet 1 of 2

Route Description [illegible] in snow QA Check [illegible] 5-18

No. of Tracks		Location	Notes
In	Out		
		2:47.1 Regal Gate	
|||| 4		47.3 Coy Track	
		47.5 [illegible]	[illegible] 6
		48.3 " "	
|| 2		48.9	
||| 3		49.1	
		49.[illegible]	[illegible] Pit
		49.5 " "	Drain [illegible]
	||| 3	49.6	
|| 2		49.8	
| 2	|| 2	50.1	
	|| 2	50.2	
3	5	50.[illegible]	
13	7	50.4	
7	|| 2	50.5	
2	3	50.[illegible]	[illegible]
|| 2	|| 2	5[illegible]	
2		51.9	
2	4	52.0	
||| 3		52.2	
||| 3	8	52.7	
2		52.8	
	2	5[illegible]	K[illegible]
6	|| 2	53.6	
	|||| 4	53.7	
||| 3		5[illegible].3	
2		53.9	
6		54.0	
	9	5[illegible]	
13	6	[illegible]	
12	18	54.3 Coy Track	
	3	5[illegible]	
94	82	Totals	

(149) ✓ (93) ✓

1297081575

LARGE MAMMAL TRACK COUNT FIELD DATA SHEET

Project/Study 83/04 Date 2/11/76 Observer [illegible] Sheet 2 of 2

Route Description QA Check brw 5-1[illegible]

No. of Tracks In	No. of Tracks Out	Location		Notes
4		2,54.6	[illegible]	[illegible]
6		54.7	"	"
	3	54.8	2 "	"
4		54.9		
	2	55.0		
2	3	55.2		
1		55.3		
9		55.5		
10	3	55.7		
5		55.9		
		56.11	[illegible]	
5		57.5		
2		57.6		
		57.8	11 "	
3		58.7		
4		[illegible]		
35				
		Totals		

(139) 11 33

129 [illegible]

LARGE MAMMAL TRACK COUNT FIELD DATA SHEET

Project/Study 87/04 Date 30 APR 76 Observer C-K Sheet 1 of 2
Route Description Reagle Ranch to Buck Creek QA Check bm 5-18-7

No. of Tracks		Location	Notes
In	Out		
	ǀǀ 2	163.9	Start at Reagle Gate
ǀǀǀ 3		164.0	
ǀ 1		164.[illegible] Cow Track	
ǀǀǀǀ 4		164.4	
ǀǀǀ 3		164.6	
	ǀǀ 2	164.7	
𝍸 5		164.9	
ǀǀǀ 3		165.0	
		165.2 Cow Track	Drainage Bottom
		166.1 [illegible]	Steel Post - [illegible]
ǀǀǀ 3		166.2	
ǀǀǀ 3		166.[illegible]	
	ǀǀǀǀ 4	166.7	
𝍸 5		166.8	
	ǀǀǀǀ 4	166.9	
𝍸ǀ 6	𝍸 5	167.0	
𝍸 5	ǀ 1	167.1	
𝍸ǀ 6	ǀǀ 2	167.2	
	ǀ 1	167.4	
		167.6 Cow Track	
ǀǀǀ 3		168.0	
		16[illegible].1 Cow Track	
	𝍸 5	169.2	
		169.8 Cow Track	
𝍸 5		170.1	
ǀ 1	ǀǀǀ 3	170.2	
ǀǀ 2		170.[illegible] Cow Track	
𝍸 5		170.4	
ǀǀǀ 3		170.5	
	ǀǀǀ 3	170.6	
𝍸 5	𝍸ǀ 6	170.7	[illegible]
		170.[illegible]	
71✓	38✓	Totals	

(100) (48) ✓

LARGE MAMMAL TRACK COUNT FIELD DATA SHEET

Project/Study 8304 Date 30 APR 76 Observer C.K Sheet 2 of 2

Route Description ____ QA Check bmw 5-

No. of Tracks		Location	Notes
In	Out		
‖ 3		170.9	Stop Sign - S. W/ Ranch
~~||||~~ 5		171.0	
||| 3	| 1	171.1	Mountain Trail - Thru Site
	|||| 4	171.2	" "
|| 2		171.3 3	" " - Lots
|||| 4		171.4	Turn TO 34 Mesa
||| 3		171.7	
	|| 2	172.0	
||| 3		172.2	
|||| 4		172.4	
		172.8	Merrin flew X road
		175.5 Coy Track	Road Freshly [illegible]
|| 2		175.6	
	||| 3	176.1	END
✓ 19	✓ 10	Totals	

✓ (48)

[illegible] 2.21

LARGE MAMMAL TRACK COUNT FIELD DATA SHEET

Project/Study 37/31 Date 23 Apr 76 Observer [illegible] Sheet 1 of 2

Route Description Beagle Ranch to Duck Creek QA Check lum 5-18-76

No. of Tracks		Location		Notes
In	Out			
2	6	117.6	Regal Gate	[illegible]
‖		117.9		
5		118.0		
	2	118.2	[illegible]	[illegible]
4	1	118.4		
2		118.5		[illegible]
4	1	118.6		
		118.9	[illegible]	Drain Ditch
3		119.3		
3		119.6		
		119.75		Steel Post [illegible]
5		[illegible]		
	2	120.0		
2		120.1		
	2	120.4		
10	5	120.6		
3		120.[illegible]		
4	5	121.0		
3		121.3		
3		122.0		
		122.3	[illegible]	[illegible]
5	2	122.5		
	3	122.6		
7		123.1		[illegible]
		123.5	[illegible]	
	3	123.6		
7		123.7		
2		123.8		
3	3	124.0		
9		124.1		[illegible]
2	3	124.2		
5	3	124.[illegible]		
✓ 93	✓ 41	Totals		

(221) ✓ (130) ✓

LARGE MAMMAL TRACK COUNT FIELD DATA SHEET

Project/Study 8304 Date 23APR76 Observer CLK Sheet 2 of 2

Route Description QA Check lmw 5-18

No. of Tracks		Location	Notes
In	Out		
||| 3		615.9	
		616.2	1545 – Kestrel
	|| 2	616.5	
		617.0	Marsh hawk ♂ 1600
	|| 2	617.7	
|| 2	|||| 4	618.2	
IN 5	OUT 8	Totals	

USC 6.5.P.2.2

LARGE MAMMAL TRACK COUNT FIELD DATA SHEET

Project/Study 83/64 Date 21 April 76 Observer C. Kling Sheet 1 of 3

Route Description Riegle Ranch to Duck Creek QA Check bm 5-18-7

No. of Tracks		Location	Notes
In West Toward	Out East Away	mileage	
		442.9	start at metal posts
	1	443.7	1 set coyote tracks (start)
1		444.0	443.9 2 sets coyote tracks
2		444.1	444.7 1 rabbit
2		"	444.8 1 rabbit
2		"	
2		"	
	2	444.3	End at Riegle Ranch Gate
			445.1
			Start metal post north 447.2
2		447.4 (corner)	6 horse tracks 447.4
2		447.9	
3		"	
	3	448.0	
1		"	
3		"	
2		448.1	
	4	"	
5		448.2	
3	2	448.5	ranch hand on horse
	2	448.6	rode down sections of
2		448.7	cleared path
2		449.5	449.2 1 set coyote tracks
4		451.3	" 1 set rabbit
5	3	451.4	449.9 coyote
2		451.7	450.3 rabbit + coyote
	3	451.8	
3	2	451.9	Bottom of Stike Springs
4	2	452.0	452.1 Stop sign
4	4	452.1	
3		452.1	
	2	452.2	
59 ✓	30 ✓	Totals 89 ✓	

176 in 76 out ✓ 129/081575 (252) ✓

LARGE MAMMAL TRACK COUNT FIELD DATA SHEET

Project/Study 83/04 Date 21 April 76 Observer C.L. Kling Sheet 2 of 3

Route Description ____ QA Check bmw 5-13-76

No. of Tracks		Location	Notes
In west	Out east		
3		452.2	at 84 Ranch
4		"	
9		452.3	
	4	452.3	
5		452.4	
2		"	
10	3	452.5	2.5+ turning up 84 Mesa
2	3	452.6	
2		"	
2		452.7	coyote 452.8
4	2	"	another set also (may have been same coming + going)
3	2	453.1	453.0 crossing cattle guard
			lower bench mark @ 453.2
3	3	453.9	453.5 1 coyote
3		454.1	
6	3	"	
3	2	"	
	2	"	
2		454.2	
11		454.3	middle bench
3	1	"	
2		454.5	1 lone black horse + his tracks
4		454.9	455.6 rabbit
4		456.2	
4	2	456.2	Benchmark
6	2	456.3	
	2	"	
	2	" (corner)	
1		"	
6		456.4	
2			
	3	456.5	rabbit tracks
106 ✓	36 ✓	Totals 142	

(252) ✓

1297081575
1297081575

LARGE MAMMAL TRACK COUNT FIELD DATA SHEET

Project/Study 83/04 Date 4-21-76 Observer C L Kling Sheet 3 of 3

Route Description QA Check bnw 5-18-7

No. of Tracks		Location	Notes
In	Out		
	3	456.5	
2		456.6	
4		"	
5	2	456.7	rabbit tracks
	3		
	2	456.8	
		457.2 END	1 red-tailed hawk
11 ✓	10 ✓	Totals 21	

2.3.7 Avifauna

2.3.7.3 Results

The baseline avifauna program was continued this quarter with songbird quantitative and qualitative transects, blue grouse upland gamebird surveys, waterfowl and shorebird counts and raptor aerial and ground surveys. Six new bird species were encountered during field studies this reporting quarter. These six species bring the total number of birds observed to date within the study area to 138 species. (Two new species were encountered during the 6th reporting quarter. One hundred thirty species were observed during the first year of baseline studies; the figure of 129 species observed during the first year, reported in the Annual Report and 5th Quarterly Report, is in error.) Fifty-six bird species were observed within the study area during this quarter. These species, the habitat in which they were observed, and months of observation are presented in Table 2.3-33.

The greater sandhill crane*and the whooping crane*were two species of interest observed during this quarter. The shoveler, whooping crane, hairy woodpecker, bohemian waxwing, evening grosbeak and pine grosbeak were observed for the first time since the start of the RBOSP baseline program during this quarter.

2.3.7.3.1 Quantitative Transects

Quantitative transects, initiated during February 1976 as part of the previous reporting quarter, were interrupted due to inclement weather. Only six of the 15 transects (Transect 1 - Bottomland Meadow, Transect 3 - Rabbitbrush, Transect 6 - Pinyon-Juniper/Sagebrush, Transect 11 - Sagebrush, Transect 12 - Mixed Brush, and Transect 16 - Riparian) were run 13 to 17 February. Seven transects (Transect 2 - Sagebrush, Transect 4 - Pinyon-Juniper/Mixed Brush, Transect 5 - Mixed Brush, Transect 8 - Greasewood/Sagebrush, Transect 9 - Pinyon-Juniper (s), Transect 10 - Pinyon-Juniper (n) and Transect 13 - Douglas Fir) were run 8-10 March. Snow prevented access to two transects (Transect 7 - Upland Meadow and Transect 14 - Aspen. All of the winter census is reported in this report. Spring transects were run on 20, 21, 23, 28 and 29 April 1976. All transects were run during the spring census.

2.3.7.3.1.1 Transect 1 - Bottomland Meadow

Only two bird species, a flock of horned larks and three black-billed magpies, were observed within bottomland meadow

---

* See endangered species section 2.3-12.

Table 2.3-33. Bird species observed, habitat in which birds were observed and months of observation for bird species encountered during 7th quarter for RBOSP.

	Aspen	Douglas Fir	Upland Meadow	Mixed Brush low elevation	Mixed Brush high elevation	Pinyon-Juniper north slope	Pinyon-Juniper south slope	Pinyon-Juniper Mixed Brush	Pinyon-Juniper Sagebrush	Sagebrush low elevation	Sagebrush high elevation	Greasewood - Sagebrush	Rabbitbrush	Riparian	Bottomland Meadow	Aerial[1]	Comments
Mallard														A,W		A	
Green-winged Teal														W		A	
Shoveler														W			N
Golden Eagle				M												R	
Marsh Hawk																A	
American Kestrel																A	
Blue Grouse																	B
Whooping Crane															0,Y		N
Greater Sandhill Crane														0,A	0,Y		
Killdeer														FAW			
Common Snipe														F,A			
Mourning Dove									A								
Screech Owl																	C
Great Horned Owl	A																C
Pygmy Owl																	C
Long-eared Owl																	C,D
Short-eared Owl																	C
Saw-whet Owl																	C,D
Poor Will																	C

Table 2.3-33 (Continued)

	Aspen	Douglas Fir	Upland Meadow	Mixed Brush low elevation	Mixed Brush high elevation	Pinyon-Juniper north slope	Pinyon-Juniper south slope	Pinyon-Juniper Mixed Brush	Pinyon-Juniper Sagebrush	Sagebrush low elevation	Sagebrush high elevation	Greasewood - Sagebrush	Rabbitbrush	Riparian	Bottomland Meadow	Aerial^1	Comments
Common Flicker	A	M,A		A		M	M	M,A	A							A	
Hairy Woodpecker		M															N
Say's Phoebe									Q				A		A		
Horned Lark			A		F,A				F	M			Q		F	F,M	
Rough-winged Swallow														A			
Steller's Jay		A															
Scrub Jay				M			M	M,A	F,A				F,A	F,A		M	
Black-billed Magpie							A								F	F	
Common Raven	A		A			A			A					A		FMAR	
Piñon Jay							M,A	M	F							M,A	
Clark's Nutcracker	A	M,A				A						Q					
Black-capped Chickadee	A	M,A		M	F			M									
Mountain Chickadee	A	M				M	M	M,A	A								
White-breasted Nuthatch							A		A								
Red-breasted Nuthatch	A	M,A				M											
Rock Wren									Q			A	A				
Sage Thrasher												A					
American Robin						A	M	M,A	A		A		A	A	A		
Mountain Bluebird				M		M	M,A	M	A		A	A		A	A	M	

Table 2.3-33 (Continued)

	Aspen	Douglas Fir	Upland Meadow	Mixed Brush low elevation	Mixed Brush high elevation	Pinyon-Juniper north slope	Pinyon-Juniper south slope	Pinyon-Juniper Mixed Brush	Pinyon-Juniper Sagebrush	Sagebrush low elevation	Sagebrush high elevation	Greasewood - Sagebrush	Rabbitbrush	Riparian	Bottomland Meadow	Aerial[1]	Comments
Ruby-crowned Kinglet		M															
Bohemian Waxwing											F					F	N
Western Meadowlark											Q				A		
Red-winged Blackbird												A		F,A	A		
Evening Grosbeak					A	M	M	M	F,A		A	M				FMA	N
House Finch						M		M	A				F			A	
Pine Grosbeak		M															N
Red Crossbill		M,A			A		M		F,A		A					A	
Green-tailed Towhee				A							A	Q	A	A			
Rufous-sided Towhee			A	M				M,A									
Vesper Sparrow			A	A	A						A	A	A				
Sage Sparrow									Q	M		M	Q	Q			
Dark-eyed Junco				M	A			M,A	A			M,A	A				
Chipping Sparrow										A	A						
Brewer's Sparrow												A	A				
White-crowned Sparrow												A					
Golden-crowned Sparrow												A					
Song Sparrow												A	A	A	A		

Table 2.3-33(Continued)

Codes

F = February

M = March

A = April

Y = May

N - New species for RBOSP baseline program

Q = Observed in qualitative transect

B = Observed on grouse transect

C = Observed on night owl transect

O = Opportunistic

R = Observed on raptor aerial census

D = First reported in 6th Quarterly Report

W = Waterfowl and shore bird counts

[1] = Species observed in flight, thus not associated with a particular habitat at time of observation

vegetation during the winter census. Mountain bluebirds, robins, song sparrows and western meadowlarks comprised the majority of the seven bird species observed within this vegetation type during the spring census.

2.3.7.3.1.2 Transect 2 - Sagebrush (low elevation)

Two bird species were observed within this vegetation type during the winter census, with a flock of horned larks comprising most of the individuals seen. The chipping sparrow was the only species observed during the spring census.

2.3.7.3.1.3 Transect 3 - Rabbitbrush

A snow storm interrupted the winter transect being run on 14 February 1976, and the transect was thus continued the following day. The scrub jay and the house finch were the only two species observed within rabbitbrush vegetation during the winter census. Nine species were observed during the spring census. Green-tailed towhees, vesper sparrows and dark-eyed juncos were the most frequently observed species.

2.3.7.3.1.4 Transect 4 - Pinyon-Juniper/Mixed Brush

Eleven species were observed within pinyon-juniper/mixed brush vegetation during the winter census. The dark-eyed junco, evening grosbeak (new species) piñon jay and mountain bluebird were the most frequently encountered species. Nine species were observed during the spring census. The common flicker, rufous-sided towhee and mountain bluebird were most frequently observed.

2.3.7.3.1.5 Transect 5 - Mixed Brush (low elevation)

Six species were observed within mixed brush vegetation during the winter census. The scrub jay and dark-eyed junco comprised the majority of the birds seen. The vesper sparrow, green-tailed towhee and common flicker were the three species observed during the spring census.

2.3.7.3.1.6 Transect 6 - Pinyon-Juniper/Sagebrush

Five bird species were recorded within pinyon-juniper/ mixed brush vegetation during the winter census. The evening grosbeak was the most frequently observed species. Twelve species were encountered during the spring census. The house finch was the most frequently observed species.

2.3.7.3.1.7 Transect 7 - Upland Meadow

Snow drifts prevented access to this transect during February and March, thus the transect was not run during this period. Four species were recorded during the spring census. The vesper sparrow and horned lark comprised the majority of the individuals seen.

2.3.7.3.1.8 Transect 8 - Greasewood/Sagebrush

Three species were observed within greasewood/sagebrush vegetation during the winter census with the dark-eyed junco being most abundant. Eleven species were recorded during the spring census. The red-winged blackbird and the white-crowned sparrow were most abundant.

2.3.7.3.1.9 Transect 9 - Pinyon-Juniper (south slope)

Eight species were recorded within south slope pinyon-juniper vegetation during the winter census. The piñon jay, mountain chickadee and robin were most frequently encountered. Five species were observed during the spring census with the mountain bluebird being most abundant.

2.3.7.3.1.10 Transect 10 - Pinyon-Juniper (north slope)

Six species were recorded within the north slope pinyon-juniper vegetation type during the winter census. The evening grosbeak and the house finch were most frequently encountered. The robin, Clark's nutcracker and common raven were the three species observed during the spring census.

2.3.7.3.1.11 Transect 11 - Sagebrush (high elevation)

The bohemian waxwing was the only species observed within sagebrush vegetation during the winter census. Seven species were observed during the spring census with the evening grosbeak, red crossbill and mountain bluebird most abundant.

2.3.7.3.1.12 Transect 12 - Mixed Brush

Two species, the horned lark and black-capped chickadee were observed within mixed brush vegetation during the winter census. Five species, with a flock of evening grosbeaks being most abundant, were observed during the spring census.

2.3.7.3.1.13 Transect 13 - Douglas Fir

Nine species were recorded during the winter census within Douglas-fir vegetation. The mountain chickadee and red-breasted nuthatch were most frequently encountered. The hairy woodpecker and the pine grosbeak, two new species, were observed during the winter census. Six species were observed during the spring census, with the Clark's nutcracker being most abundant.

2.3.7.3.1.14 Transect 14 - Aspen

This transect was not run during the winter census period due to inaccessibility. Seven species were encountered during the spring census, with the black-capped chickadee and common flicker most frequently observed.

2.3.7.3.1.15 Transect 15 - Riparian

Four species, with the red-winged blackbird most abundant, were observed in riparian vegetation during the winter census. Nine species were observed within this vegetation type during the spring census. The mallard, red-winged blackbird and song sparrow were most abundant. A tenth species, the rough-winged swallow, was observed hawking insects above the riparian areas.

2.3.7.3.2 Qualitative Transects

Qualitative transect surveys are conducted to census bird species that may not have been censused in other bird studies. No new species were encountered during qualitative transects. All bird species observed on qualitative transects were also observed during other phases of the winter-spring avifauna program.

2.3.7.3.3 Upland Game Birds

2.3.7.3.3.1 Blue Grouse

Blue grouse were censused using a standard road transect on 17, 20 and 25 May 1976. The transect run of the 17th was completed in its entirety. The transect started on 20 May was halted after 10.4 km (615 mi) as high winds made observations impossible. The transect of 25 May resumed where the 20 May transect ended. The road transect traverses upland meadow, mixed brush, aspen and Douglas fir vegetation types Thirteen blue grouse were observed during the 17 May transect. Only one grouse was observed at the start of the second transect; four birds were observed at its completion.

2.3.7.3.4 Waterfowl and Shorebirds

Waterfowl and shorebird surveys were conducted on four consecutive days, 20-23 April 1976, at Stake Springs pond. Four species were observed (mallard, green-winged teal, shoveler and killdeer) with the mallard being most abundant, both the mallard and killdeer being observed on all counts. The shoveler was observed for the first time during the RBOSP baseline program during the April waterfowl counts.

2.3.7.3.5 Raptors

Two aerial raptor censuses were conducted during the 7th reporting quarter. The first was conducted on 8 March 1975. One common raven and five golden eagles were observed during this census. The second aerial survey was conducted on 25 March 1976. Two common ravens were the only raptor-like species observed.

Two owl night road transects were conducted during the reporting quarter. The first transect commenced on 15 May 1976, but was stopped halfway through as high winds made observations impossible. The transect was resumed on the following evening (16 May 1976) where the previous night's transect had ended. Two short-eared owls and one saw-whet owl were observed during the first night of the transect. Two great-horned owls, one saw-whet owl and one long-eared owl were observed during the second night of the transect. The second transect commenced on 17 May 1976 and was completed in its entirety that evening. One long-eared owl, six great horned owls, two saw-whet owls, one short-eared owl, one screech owl and two pygmy owls were observed during the May transect. One poor will was also observed on this transect.

Raw data sheets for avifauna studies follow in Section 2.3.7.5.

2.3.7.5
Avifauna Raw Data

AVIFAUNA

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C.9.12.1

Sheet No. 1 of 1

Transect # 1

Vegetation Type Bottomland meadow

Sample Period 7

Date 2/16/76

Time (24 hour) 0910-0935

Temperature (°C) at Start -2°C

Wind (Beaufort Code #) 2

Sky Condition Code # 0

Observer P. L. Kennedy

Comments:

QA Check lm 3-16-76

Species	Code No.	Adj. Cat.	Number Observed per Strip 0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	Fly Over
Common raven	447	A							|
Horned lark	128	B					𝍸 𝍸 𝍸 𝍸 𝍸		
Black-billed magpie	444	A						|||	

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FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2.3

Sheet No. 1 of 1

Transect # 2 Vegetation Type Sagebrush Sample Period 7

Date 3/8/76 Time (24 hour) 0840-1000 Temperature (°C) at Start 3° C

Wind (Beaufort Code #) 1 Sky Condition Code # 0 Observer P.L. Kennedy

Comments:

QA Check bmw 3-16-76

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Horned lark	428	C				卌 ||	卌 卌 ||	卌 卌 ||	卌 卌
Pinyon jay	491	A							卌 ||
Sage sparrow	661	C			|	||	卌 |		

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2.7

Sheet No. 1 of 2

Transect # 3 Vegetation Type Rabbitbrush Sample Period 7

Date 2/14/76 Time (24 hour) 1510-1555 Temperature (°C) at Start 4°C

Wind (Beaufort Code #) 2 Sky Condition Code # 2 Observer P L Kennedy

Comments: Discontinued due to snowstorm

QA Check hm. 3-16-76 (✓)

Species	Code No.	Adj. Cat.	Number Observed per Strip 0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	Fly Over
Raven									1

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FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. ________

File No. 839.1.2.7

Sheet No. 2 of 2

Transect # 3 Vegetation Type [illegible] Sample Period 7

Date [illegible] Time (24 hour) [illegible] Temperature (°C) at Start 0°C

Wind (Beaufort Code #) 1 Sky Condition Code # 2 Observer [illegible]

Comments: Stormfront moving in from west QA Check bm 3-16-76

Species	Code No.	Adj. Cat.	Number Observed per Strip 0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	Fly Over
Evening Grosbeak	621	B							𝍸 III
Scrub Jay	439	A				I	II		
House Finch	629	B						II	

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FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 8309.1.2.10

Sheet No. 1 of 1

Transect # 4

Vegetation Type Pinyon-juniper/mixedbrush

Sample Period 7

Date 3/10/76

Time (24 hour) 0650-0800

Temperature (°C) at Start 3°C

Wind (Beaufort Code #) 1

Sky Condition Code # 0

Observer P.L. Kennedy

QA Check bm 3-16-76

Comments:

Species	Code No.	Adj. Cat.	Number Observed per Strip 0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	Fly Over
Black-capped chickadee	452	B					1		
House finch	629	B				1		1	
Dark-eyed junco	662	B		11	11				
Common flicker	373	A						1	
Evening grosbeak	621	B						1111	
Mountain chickadee	454	B					11		
Pinyon jay	491	A			1	~~1111~~			
Rufous-sided towhee	646	C			1				
Robin	493	B						1	
Mountain bluebird	505	B					1	111	
Scrub jay	439	A						1	

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FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2

Sheet No. 1 of 1

Transect # 5

Vegetation Type Mixed Brush/Lowland northslope

Sample Period 7

Date 3/10/76

Time (24 hour) 0855-1000

Temperature (°C) at Start 8°C

Wind (Beaufort Code #) 1

Sky Condition Code # 0

Observer P.L. Kennedy

QA Check bem 3-16-76

Comments:

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Scrub jay	439	A					11	11	
Mountain Bluebird	505	B						1	
Rufous-sided towhee	646	C					1		
Black-capped chickadee	752	B					1		
Evening grosbeak	621	B							11
Golden Eagle	122	A				1			1
Dark-eyed junco	662	B						11	1

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FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 23

File No. BC9.1.2.1-

Sheet No. 1 of 1

Transect # 6

Vegetation Type [illegible]

Sample Period 7

Date [illegible]

Time (24 hour) [illegible]

Temperature (°C) at Start [illegible]

Wind (Beaufort Code #) 1

Sky Condition Code # 0

Observer [illegible]

QA Check Am 3-16-76

Comments:

Species	Code No.	Adj. Cat.	Number Observed per Strip 0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	Fly Over
Red crossbill	641	C						1	
Horned lark	425	B					1		65
Scrub jay	439	A				1		1	
Black-billed magpie	444	A							11
Evening grosbeak	621	B					1111		
Pinyon jay	441	A						1	11

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[illegible]

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FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2.1

Sheet No. 1 of 1

Transect # 8

Vegetation Type Greasewood - Sagebrush

Sample Period 7

Date 3/9/76

Time (24 hour) 0700-0810

Temperature (°C) at Start -8°

Wind (Beaufort Code #) 1

Sky Condition Code # 0

Observer P.L. Kennedy

Comments:

QA Check bm 3-16-76

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Evening grosbeak	621	B							1
Red-winged blackbird	596	B						1	
Scrub jay	439	A							11
Dark-eyed junco	662	B			1	111	11		
Mountain bluebird	505	B							1
Sage sparrow	661	C			1				

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RBOSP PROGRESS REPORT

PF

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2.15

Sheet No. 1 of 1

Transect # 9

Vegetation Type Pinyon-juniper (South slope)

Sample Period 7

Date 3/9/76

Time (24 hour) 1440-1600

Temperature (°C) at Start 9°

Wind (Beaufort Code #) 3

Sky Condition Code # 0

Observer P. L. Kennedy

QA Check lrm 3-16-76

Comments:

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Scrubjay	439	A					|		
Robin	493	B			|	||		|	
Mountain bluebird	505	B						||	
Red crossbill	641	C				|			
Evening grosbeak	621	B					|	|	
Mountain chickadee	454	B			||		|||		
Pinyon jay	441	A		|		||	~~||||~~	|	
Common flicker	373	A			|	|			

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FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.21

Sheet No. 1 of 1

Transect # 10 Vegetation Type Pinyon-juniper (north slope) Sample Period 7

Date 3/9/76 Time (24 hour) 630-1730 Temperature (°C) at Start 7°

Wind (Beaufort Code #) 2 Sky Condition Code # 0 Observer P.L. Kennedy

Comments: QA Check bm 3-16-76

Species	Code No.	Adj. Cat.	Number Observed per Strip 0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	Fly Over
Evening grosbeak	621	B			11	1	11		1
Common flicker	373	A						1	
Red-breasted nuthatch	469	B					1		
House finch	629	B			1			11	
Mountain chickadee	454	B						1	
Mountain bluebird	505	B				1			

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FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. ______ File No. 83C9.1.2.1

Sheet No. ____ of ____

Transect # 11 Vegetation Type ______ Sample Period 7

Date ______ Time (24 hour) 0715-[illegible] Temperature (°C) at Start ______

Wind (Beaufort Code #) ______ Sky Condition Code # 1 Observer ______

Comments: Snowed the night before QA Check hsm 3-11-76

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Black-billed magpie	444	A							11
Bohemian waxwing	516	B					11		
d									

PF

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2

Sheet No. 1 of 1

Transect # 12 Vegetation Type Mixed Brush (south slope) Sample Period 7

Date 2/13/76 Time (24 hour) 1405-1510 Temperature (°C) at Start 13°

Wind (Beaufort Code #) 2 Sky Condition Code # 0 Observer P.L. Kennedy

Comments:

QA Check lun 3-16-76

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Hairy woodpecker	389	A							1
Horned lark	428	B				1			
Black-capped chickadee	452	B				1		11	

RCOSP [illegible]

PF

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83 C9.1.2.15

Sheet No. 1 of 1

Transect # 13

Vegetation Type Douglas fir

Sample Period 7

Date 3/10/76

Time (24 hour) 1500-1745

Temperature (°C) at Start 9°

Wind (Beaufort Code #) 1

Sky Condition Code # 0

Observer P. L. Kennedy

Comments:

QA Check lim 3-11-76

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Black-capped chickadee	452	B		|	||||	|			
Mountain chickadee	454	B		||	||| 卌	卌	卌	卌 |||	
Ruby-crowned kinglet	509	B		|		卌	||		
Red-breasted nuthatch	469	B		|	卌 ||	卌	||||	||||	
Red crossbill	641	C				||	||		
Hairy woodpecker	388	A					|		
Pine grosbeak	630	B		|	||	|	|		
Clark's nutcracker	446	A			||		|||	||	
Common flicker	373	A			|			|	

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RBOSP PROGRESS REPORT
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PF

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C 9.1.2.

Sheet No. 1 of 1

Transect # 15

Vegetation Type Riparian woodland

Sample Period 7

Date 2/16/76

Time (24 hour) 0700-0745

Temperature (°C) at Start -11°

Wind (Beaufort Code #) 2

Sky Condition Code # 3

Observer P. L. Kennedy

Comments:

QA Check bm 3-16-76

Species	Code No.	Adj. Cat.	Number Observed per Strip 0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	Fly Over
ohemian waxwing	516	B							110
Scrub jay	439	A						11	
mon Raven	447	A							1
ed-winged blackbird	596	B		11	11	11	11		
vening grosbeat	621	B							1111
Killdeer	200	A		11					
Common snipe	241	B		11					

83C9.1.2.1

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83
File No. ____
Sheet No. 1 of 1
Transect # 1
Vegetation Type [illegible] Meadow
Sample Period 8
Date 4/20/76
Time (24 hour) 1530-1630
Temperature (°C) at Start 17°
Wind (Beaufort Code #) 3
Sky Condition Code # 1
Observer [illegible]
QA Check [illegible] 5-5-76
Comments:

Species	Code No.	Adj. Cat.	Number Observed per Strip 0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	Fly Over
Mountain bluebird	505	A		|	|||	||	| 𝍸 𝍸	𝍸	||
Robin	493	A			|	|	|||		
Red-winged blackbird	596	A						|	
Song sparrow	683	B		||	|			|	
Say's phoebe	911	B					|		
western meadowlark	594	A					||||	|	
Common flicker	373	A							|

83C9.1.2.3

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83
File No.
Sheet No. 1 of 1
Transect # 2
Vegetation Type Sagebrush
Sample Period 8
Date 4/20/76
Time (24 hour) 1630-1715
Temperature (°C) at Start 15°
Wind (Beaufort Code #) 3
Sky Condition Code # 1
Observer P. L. Kennedy
Comments:
QA Check lum 5-5-76

Species	Code No.	Adj. Cat.	Number Observed per Strip 0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	Fly Over
Chipping Sparrow	671	C			1		1		

REPORT

83C9.1.27

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No.

Sheet No. 1 of 1

Transect # 3

Vegetation Type Rabbitbrush

Sample Period [illegible]

Date [illegible]

Time (24 hour) 0550-0700

Temperature (°C) at Start 2°

Wind (Beaufort Code #) 2

Sky Condition Code # 1

Observer

Comments:

QA Check [illegible] 5-5-76

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Evening Grosbeak	621	B							[illegible]
Green-tailed towhee	645	B			|	|	|		
Robin	493	B						|	|
Common Raven	447	A							|
House finch.	629	B							||||
Say's phoebe	411	B						||	
Vesper sparrow	658	B		|		|	||		
Rock wren	479	B						|	
Dark-eyed junco	662	B			||		|		
Scrub jay	439	A					|		
Brewer's sparrow	673	C					||		
Song sparrow	683	A				|			

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FIELD DATA SHEET - EMLEN STRIP CENSUS

File No. 83C9.1.2.11
Project No. 83
Sheet No. 1 of 1
Sample Period 8
Transect # 4
Vegetation Type Pinyon-juniper/mixed brush
Date 4/21/76
Time (24 hour) 1725-1820
Temperature (°C) at Start 19.0
Wind (Beaufort Code #) 1
Sky Condition Code # 2
Observer P.L. Kennedy
QA Check bmw 5-5-76

Comments:

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
ufous-sided towhee	646	B				1	1		
Pinyon jay	441	A					1		
ountain bluebird	505	B				1	1	11	
Dark-eyed junco	66[illegible]	B				1			
Marsh hawk	109	A							1
Mountain chickadee	454	B						1	
Robin	493	B						1	
Scrub jay	437	A			1				
Common flicker	373	A						11	
American kestrel	120	A						1	

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2. 18

Sheet No. 1 of 1

Transect # 5 Vegetation Type Mixed Brush Sample Period 8

Date 4/21/76 Time (24 hour) 1530-1610 Temperature (°C) at Start 17°

Wind (Beaufort Code #) 3 Sky Condition Code # 2 Observer P.L.Kenna

Comments:

QA Check hm 5-5-76

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Common flicker	372	A					1		
Green-tailed towhee	645	B					1		
Pinyon jay	441	A							11
Vesper sparrow	658	B				11			

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2.1

Sheet No. 1 of 1

Transect # 6

Vegetation Type Pinyon-juniper/mixed brush

Sample Period 8

Date 4/20/76

Time (24 hour) 0555 - 0705

Temperature (°C) at Start -1°

Wind (Beaufort Code #) 0

Sky Condition Code # 0

Observer P. L. Kennedy

QA Check 5-5-76

Comments:

<table>
<tr><th rowspan="2">Species</th><th rowspan="2">Code No.</th><th rowspan="2">Adj. Cat.</th><th colspan="6">Number Observed per Strip</th><th rowspan="2">Fly Over</th></tr>
<tr><th>0-10'</th><th>10-25'</th><th>25-50'</th><th>50-100'</th><th>100-200'</th><th>200-400'</th></tr>
<tr><td>Scrub jay</td><td>479</td><td>A</td><td></td><td></td><td></td><td></td><td>|</td><td></td><td></td></tr>
<tr><td>House finch</td><td>629</td><td>B</td><td></td><td></td><td></td><td>|||</td><td>|</td><td>|||</td><td></td></tr>
<tr><td>Red crossbill</td><td>641</td><td>B</td><td></td><td></td><td></td><td></td><td></td><td>|||</td><td></td></tr>
<tr><td>Common flicker</td><td>373</td><td>A</td><td></td><td></td><td></td><td></td><td>|</td><td>||</td><td></td></tr>
<tr><td>Evening grosbeak</td><td>621</td><td>B</td><td></td><td></td><td>||</td><td>|| 𝍸</td><td></td><td>|||</td><td>𝍸 |</td></tr>
<tr><td>ountain bluebird</td><td>505</td><td>B</td><td></td><td></td><td></td><td>||||</td><td></td><td>|</td><td></td></tr>
<tr><td>ack-eyed junco</td><td>662</td><td>B</td><td></td><td></td><td></td><td>|||</td><td></td><td></td><td></td></tr>
<tr><td>Mourning dove</td><td>310</td><td>B</td><td></td><td></td><td></td><td>|</td><td></td><td></td><td></td></tr>
<tr><td>ountain chickadee</td><td>454</td><td>B</td><td></td><td>|||</td><td>||</td><td>|</td><td></td><td></td><td></td></tr>
<tr><td>-breasted nuthatch</td><td>468</td><td>B</td><td></td><td></td><td>|</td><td></td><td></td><td></td><td></td></tr>
<tr><td>mon raven</td><td>477</td><td>A</td><td></td><td></td><td></td><td></td><td></td><td>|</td><td></td></tr>
<tr><td>Robin</td><td>493</td><td>B</td><td></td><td></td><td></td><td></td><td>|||</td><td></td><td></td></tr>
<tr><td>Pinyon jay</td><td>491</td><td>A</td><td></td><td></td><td></td><td></td><td></td><td></td><td>||</td></tr>
</table>

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2.13

Sheet No. 1 of 1

Transect # 7 Vegetation Type Upland Meadow Sample Period F

Date 9/29/76 Time (24 hour) 0641-0730 Temperature (°C) at Start -1

Wind (Beaufort Code #) 2 Sky Condition Code # 2 Observer P L. Kenne

QA Check lwn 5-5-76

Comments:

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Vesper sparrow	658	B		1	1	1			
Rufous-sided towhee	696	B				11			
Evening grosbeak	621	B							卌
Common raven	497	A						1	
Horned lark	475	B				111			

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FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2.14

Sheet No. 1 of 1

Transect # 8 Vegetation Type [illegible] Sample Period 2

Date 7/21/76 Time (24 hour) [illegible] Temperature (°C) at Start 10°

Wind (Beaufort Code #) 0 Sky Condition Code # 1 Observer [illegible]

QA Check [illegible] 5-5-76

Comments:

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
l-winged blackbir	596	B				|	||	||	
Green-winged teal	71	A							|
Mallard	59	A							
Sage thrasher	487	B			|	|	||		|
Common raven	447	A							
Rock wren	479	B						|	
Red crossbill	691	B							||
Brewer's sparrow	673	C				|			
Song sparrow	683	B					||		
Vesper sparrow	635	B					|	|	
Evening grosbeak	621	B							|
Mountain bluebird	305	B					|		
White crowned sparrow	677	B				||	||		
Pinyon jay	441	A							|||
Dark-eyed junco	66	B				|			
n crowned sparrow	678	B				|	|		

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2.15

Sheet No. 1 of 1

Transect # 9

Vegetation Type Pinyon- juniper

Sample Period 2

Date 4/23/76

Time (24 hour) 1600-1900

Temperature (°C) at Start 16 °C

Wind (Beaufort Code #) 2

Sky Condition Code # 1

Observer P. L. Kenner

QA Check lmw 5-5-76

Comments:

Species	Code No.	Adj. Cat.	Number Observed per Strip 0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	Fly Over
Mountain bluebird	505	B						III	
Unidentified species					II				
Black-billed magpie	444	A						II	
Pinyon jay	441	A						I	
White-breasted nuthatch	468	B						I	

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2.15

Sheet No. 1 of 1

Transect # 10
Vegetation Type Pinyon-juniper
Sample Period 8

Date 4/23/76
Time (24 hour) 1720-1810
Temperature (°C) at Start 9°

Wind (Beaufort Code #) 3
Sky Condition Code # 1
Observer R.L. Kennedy

Comments:
QA Check lmw 5-5-76

Species	Code No.	Adj. Cat.	Number Observed per Strip 0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	Fly Over
Robin	443	B						1	
lack's nutcracker	446	A					1		
ommon raven	447	A					1		

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RBCSP PROGRESS

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2.17

Sheet No. 1 of 1

Transect # 11 Vegetation Type Sagebrush Sample Period 8

Date 4/20/76 Time (24 hour) 0710-0810 Temperature (°C) at Start 3°

Wind (Beaufort Code #) 0 Sky Condition Code # 0 Observer R.L. Kenn

QA Check 5-5-76

Comments:

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Vesper sparrow	658	B					||		
Mountain bluebird	505	B			|	||	|||		
Robin	493	B					|		
Red crossbill	641	B						||	𝍸
Evening grosbeak	621	B						𝍸 |	𝍸 |
Chipping sparrow	671	C			|	|			
Green-tailed towhee	645	B				|	|		

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FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 83C9.1.2.1

Sheet No. 1 of 1

Transect # 12 Vegetation Type Mixed Bush Sample Period 8

Date 4/27/76 Time (24 hour) 0730-0815 Temperature (°C) at Start –4°

Wind (Beaufort Code #) 3 Sky Condition Code # 0 Observer P.L. Kennar

Comments:

QA Check 5-5-76

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Evening grosbeak	621	B						40	
Horned lark	928	B					1		
Vesper sparrow	658	B						11	
Red crossbill	641	B						1	
Dark-eyed junco	662	B		111					

RBOCP

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. 83

File No. 8309.1.2.19

Sheet No. 1 of 1

Transect # 13 Vegetation Type Douglas fir Sample Period 8

Date 4/29/76 Time (24 hour) 1635-1850 Temperature (°C) at Start 9°

Wind (Beaufort Code #) 2 Sky Condition Code # 1 Observer P. L. Kennedy

QA Check lum 5-5-76

Comments:

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
Red-breasted nuthatch	439	E					1	1	
Steller's jay	438	A					1	11	
Red crossbill	691	B				11	1		
lark's nutcracker	445	A					1111	1	
ommon flicker	373	A					1		
lack-capped chickadee	452	B				1	11		

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RBOSP PROGRESS REPORT

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FIELD DATA SHEET - EMLEN STRIP CENSUS

File No. 83C9.1.2.20

Project No. 83

Sheet No. 1 of 1

Transect # 19

Vegetation Type Aspen

Sample Period 8

Date 9/20/76

Time (24 hour) 625-1830

Temperature (°C) at Start 20

Wind (Beaufort Code #) 3

Sky Condition Code # 1

Observer P.L. Kennedy

QA Check bmw 5-5-76

Comments:

Species	Code No.	Adj. Cat.	Number Observed per Strip						Fly Over
			0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	
lark's nutcracker	446	A						|	
ck-capped chickadee	452	B		~~||||~~			|		
mmon flicker	373	A					|	||	
-breasted nuthatch	469	B						|	
mmon raven	447	A					|		
ntain chickadee	451	B					|		
at horned owl	375	A						|	

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FIELD DATA SHEET - EMLEN STRIP CENSUS

roject No.

File No. 83C9.1.2.21

Sheet No. 1 of 2

Transect # 15

Vegetation Type Riparian

Sample Period 1

Date 7/20/83

Time (24 hour) 0730-0805

Temperature (°C) at Start 20

Wind (Beaufort Code #) 3

Sky Condition Code # 1

Observer [illegible]

Comments: [illegible]

QA Check [illegible]

Species	Code No.	Adj. Cat.	Number Observed per Strip 0-10'	10-25'	25-50'	50-100'	100-200'	200-400'	Fly Over
Robin	493	B		|	|	|||||	𝍸	|	
Red-winged blackb	498	B				|			
t-capped chickadee	452	B						|	
Mountain bluebird	505	B						|	
d-winged Swallow	435	A							|

FIELD DATA SHEET - EMLEN STRIP CENSUS

Project No. [illegible]

File No. 83C9,1,2.31

Sheet No. 1 of 1

Transect # 15

Vegetation Type P[illegible]

Sample Period [illegible]

Date [illegible]/76

Time (24 hour) [illegible]/125[illegible]

Temperature (°C) at Start 17°

Wind (Beaufort Code #) 0

Sky Condition Code # 1

Observer [illegible]

Comments:

QA Check [illegible] 5-5-76

<table>
<tr><th rowspan="2">Species</th><th rowspan="2">Code No.</th><th rowspan="2">Adj. Cat.</th><th colspan="6">Number Observed per Strip</th><th rowspan="2">Fly Over</th></tr>
<tr><th>0-10'</th><th>10-25'</th><th>25-50'</th><th>50-100'</th><th>100-200'</th><th>200-400'</th></tr>
<tr><td>Mountain bluebird</td><td>505</td><td>B</td><td></td><td></td><td></td><td></td><td></td><td>|</td><td></td></tr>
<tr><td>Red crossbill</td><td>691</td><td>B</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Robin</td><td>493</td><td>B</td><td></td><td></td><td></td><td>|</td><td>|</td><td>|</td><td></td></tr>
<tr><td>Pinyon jay</td><td>441</td><td>A</td><td></td><td></td><td></td><td></td><td></td><td></td><td>|||</td></tr>
<tr><td>Green-tailed towhee</td><td>645</td><td>B</td><td></td><td></td><td></td><td></td><td></td><td>|</td><td></td></tr>
<tr><td>Scrub jay</td><td>439</td><td>A</td><td></td><td></td><td></td><td></td><td></td><td>|</td><td></td></tr>
<tr><td>American Kestral</td><td>130</td><td>A</td><td></td><td></td><td></td><td></td><td></td><td></td><td>|</td></tr>
<tr><td>Song sparrow</td><td>683</td><td>B</td><td></td><td>|</td><td>|||</td><td>||</td><td></td><td></td><td></td></tr>
<tr><td>Common loon</td><td>447</td><td>A</td><td></td><td></td><td></td><td></td><td></td><td></td><td>|</td></tr>
<tr><td>d-winged blackbird</td><td>596</td><td>B</td><td></td><td></td><td></td><td>| ||||| ||||</td><td></td><td></td><td></td></tr>
<tr><td>Mallard</td><td>59</td><td>A</td><td></td><td>||</td><td>||</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Killdeer</td><td>200</td><td>A</td><td></td><td>||</td><td>|</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Common snipe</td><td>291</td><td>B</td><td></td><td>||</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>[illegible]-winged Swallow</td><td>435</td><td>A</td><td></td><td></td><td></td><td></td><td></td><td></td><td>|||</td></tr>
</table>

001/101575

RECAP PROGRESS REPORT

[illegible]ology consultants, inc.

QUALITATIV IAN RECORD

Date 3/9/76 Observer [illegible] Project [illegible]

Species	Location and Habitat Type	Number	Time	Sky	Temperature	Wind
	[illegible] -Stake		[illegible]	○	[illegible]	2
	Springs Draw					
Horned lark		IIII				
	[illegible] rabbitbrush					
	East slope Yellow Creek		[illegible]	○	[illegible]	[illegible]
Horned lark		III				
Sage sparrow		I				
	[illegible] woodland					
	[illegible] understory		3[illegible]			
	ridge east of Yellow Creek					
Immature Golden eagle		II				
Black billed magpie		I				
Evening Grosbeak		[illegible]				
Red Crossbill		I				

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QUALITATIVE AVIAN RECORD

Date 3/12/76 Observer P.L. Kennedy Project 83 9.52.1PF

Species	Location and Habitat Type	Number	Time	Sky	Temperature	Wind
	Greasewood-Sagebrush valley with					
	sparse pinyon-juniper					
	north slope - Stake Springs					
	Draw		1030	2	-8°C	2
Dark-eyed junco		𝍸 |||				
Clark's nutcracker		|				
-tailed hawk (Adult)		|				
lling or soaring						
Sage sparrow		|				
Pinyon jay		𝍸 ||||				
	Pinyon-juniper/sagebrush		1115	2	-7°C	2
	Hunk ridge					
Evening grosbeak		|				
	Greasewood/sagebrush valley with					
	pinyon-juniper on sand-					
	stone cliffs (south slope)		1135	2	-7°C	3
No birds observed						

RBOSP PROGRESS REPORT

Lum 3-16-76

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QUALITATIVE AVIAN RECORD

Date 7/20/76 Observer P.L. Kennedy Project 83

Species	Location and Habitat Type	Number	Time	Sky	Temperature	Wind
	Greasewood/sagebrush –					
	NW. of cabin on Stake					
	Springs Draw		1250	1	13° C	2
Mountain bluebird		II				
Evening grosbeak		IIII ~~IIII~~ ~~IIII~~				
Sage thrasher		I				
	Pinyon-juniper/seedtail					
	ridgetop N.W. of Stake					
	Springs cabin		1310	2	12° C	2
Red-tailed hawk		I				
Mountain bluebird		III				
Scrub jay		I				
Red crossbill		I				
Mountain chickadee		II				
	Greasewood/sagebrush					
	Stake Springs Draw –					
	west of cabin		1355	3	13° C	2
Mountain bluebird		~~IIII~~ II				
Mountain chickadee		II				
Say's phoebe		II				
Pinyon jay		II				
Robin		I				

RBOSP PROGRESS REPORT

ecology consultants, Inc.

QUALITATIVE AVIAN RECORD

Date [illegible]

Observer [illegible]

Project [illegible]

Species	Location and Habitat Type	Number	Time	Sky	Temperature	Wind
	Pinyon-juniper woodland					
	[illegible] 1 1/2 [illegible]					
	[illegible]		1330	2	15°C	3
Evening grosbeak		[illegible]				
Mountain bluebird		1				
Red crossbill		卌 1				
Mountain chickadee		1				
	Greasewood - Sagebrush					
	Rabbitbrush/Box Elder Gulch		[illegible]	2	[illegible]	3
Dark-eyed junco		1				
	P[illegible]/m[illegible]		1415		15°C	4
	brush- ridgetop south of					
	Box Elder Gulch					
Robin		1				
Common flicker		1				

RBOSP PROGRESS REPORT

ECI

83C4,8,3.

ECI

ocology co[illegible]ltants, inc.

QUALITATIVE AVIAN RECORD

Date 4/2[illegible]/76 Observer [illegible] Project [illegible]

Species	Location and Habitat Type	Number	Time	Sky	Temperature	Wind
	[illegible]		[illegible]	2	[illegible]°C	5
	[illegible]					
Common Raven		|				
Scrub jay		|				
	[illegible]					
	[illegible]		1010	2	13°C	4
Red-winged blackbird			|||			
Killdeer			||			
Robin			|			
Song sparrow			|			
Mountain bluebird		[illegible]				
	[illegible]		[illegible]	1	14°C	[illegible]
	[illegible]					
Mountain chickadee		|				
	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
Mountain bluebird		|||				
Western meadowlark		||				
Vesper sparrow		|				

ecology consultants, inc.

QUALITATIVE AVIAN RECORD

Date [illegible]
Observer [illegible]
Project [illegible]

Species	Location and Habitat Type	Number	Time	Sky	Temperature	Wind
	[illegible]					
	[illegible]					
	Northside of Corral Gulch		[illegible]	1	10°C	2
No birds observed						
	Southslope P-J /Corral Gulch		[illegible]	2	10°C	2
Common flicker		|				
Evening grosbeak		[illegible]				
Rock wren		|				
	Greasewood -sagebrush/					
	Big Duck Creek		1140	1	[illegible]	3
Green-tailed towhee		||				
Brewer's sparrow		|				
Vesper sparrow		|				
Say's phoebe		/				
Sage thrasher		||				
Mountain bluebird		|||				
	Pinyon-juniper woodland					
	ridge north of Big Duck		[illegible]	1	[illegible]	4
Mountain bluebird		|				

53C,7,5,2

ecology sultants, Inc.

QUALITATIVE AVIAN RECORD

Date 4/28/76 Observer P.L. Kennedy Project 83

Species	Location and Habitat Type	Number	Time	Sky	Temperature	Wind
	Mixed Brush / Cedar-top					
	Cathedral Bluffs, south					
	of Transect # 7		1450	1	4°C	3
No birds observed						
	Bald - Cathedral Bluffs					
	South of Transect # 7		1510	1	4°C	4
Horned lark		111				
	Mixed Brush / Cathedral					
	Bluffs - southeast facing					
	slope; north of transect					
	#19		1525	1	7°C	4
No birds observed						

QUALITATIVE AVIAN RECORD

Date 4/29/76 Observer________ Project________

Species	Location and Habitat Type	Number	Time	Sky	Temperature	Wind
	Aspen |West - Douglas Fir					
			1445		7°C	
No birds						
	Bald- west of Dougfir		15	34	9°C	
Horned lark		111				
	Mixed Brush/west of Doug					
	Fir		1515		9°C	
No birds						

RBOSP PROGRESS REPORT 5-5-76

File No. 03 9, 3, 2
Sheet No. 1 of 1

SHOREBIRD AND WATERFOWL COUNT RESULTS - FIELD DATA FORM

Project S3 Date [illegible] Observer P.L. Kennedy
Pond [illegible] Time 1020-1035 Wind 1 Temp ~11°C
Percent Sky Overcast 1 Comments QA Check [illegible] 5-5

Species	Number Observed					Notes
	Adult			Juv	Unkn	
	M	F	U			
Mallard	𝍸	𝍸	||			
Green-winged teal	|||	||				
Killdeer			|			

RBOSP PROGRESS REPORT

File No. 83C9.3.2
Sheet No. 1 of 1

SHOREBIRD AND WATERFOWL COUNT RESULTS - FIELD DATA FORM

Project 83 Date 9/20/76 Observer P.L. Kennedy
Pond State Springs Time 1805-1820 Wind 0 Temp 15°C
Percent Sky Overcast 1 Comments QA Check 5-5-76

Species	Number Observed					Notes
	Adult			Juv	Unkn	
	M	F	U			
Mallard	1	1				
Killdeer			1			

RBOSP PROGRESS REPORT

File No. 03 C7.3.2
Sheet No. ______ of ______

SHOREBIRD AND WATERFOWL COUNT RESULTS - FIELD DATA FORM

Project [illegible] Date [illegible] Observer [illegible]
Pond [illegible] Time [illegible] Wind [illegible] Temp 16 [illegible]
Percent Sky Overcast 1 Comments ______
QA Check [illegible]

Species	Number Observed					Notes
	Adult			Juv	Unkn	
	M	F	U			
Mallard	|||	|||				
Green-wingedteal	||	||				
Killdeer							

RSOSP PROGRESS FILE

File No. 83C 7.3.2
Sheet No. 1 of 1

SHOREBIRD AND WATERFOWL COUNT RESULTS - FIELD DATA FORM

Project 73 Date [illegible] Observer P.L. Kennedy
Pond [illegible] Time [illegible] - 0855 Wind 4 Temp 17°C
Percent Sky Overcast 2 Comments [illegible] winds QA Check [illegible] 5-5-76

Species	Number Observed					Notes
	Adult			Juv	Unkn	
	M	F	U			
Killdeer			||			
Green-winged teal	||	|				
Mallard	|||	|||				

RBOSP PROGRESS REPORT

File No. 83C5.3.2
Sheet No. 1 of 1

SHOREBIRD AND WATERFOWL COUNT RESULTS - FIELD DATA FORM

Project 83 Date [illegible] Observer [illegible]
d [illegible] Time 0835 - 0850 Wind 1 Temp [illegible]
Percent Sky Overcast 2 Comments [illegible] QA Check [illegible]

Species	Number Observed					Notes
	Adult			Juv	Unkn	
	M	F	U			
Green-winged teal	|	|||				
Mallard		|				
Killdeer			|			
Shoveler	|	|				

[illegible] PROGRESS REPORT

File No. 83 C 9.3.2
Sheet No. 1 of 1

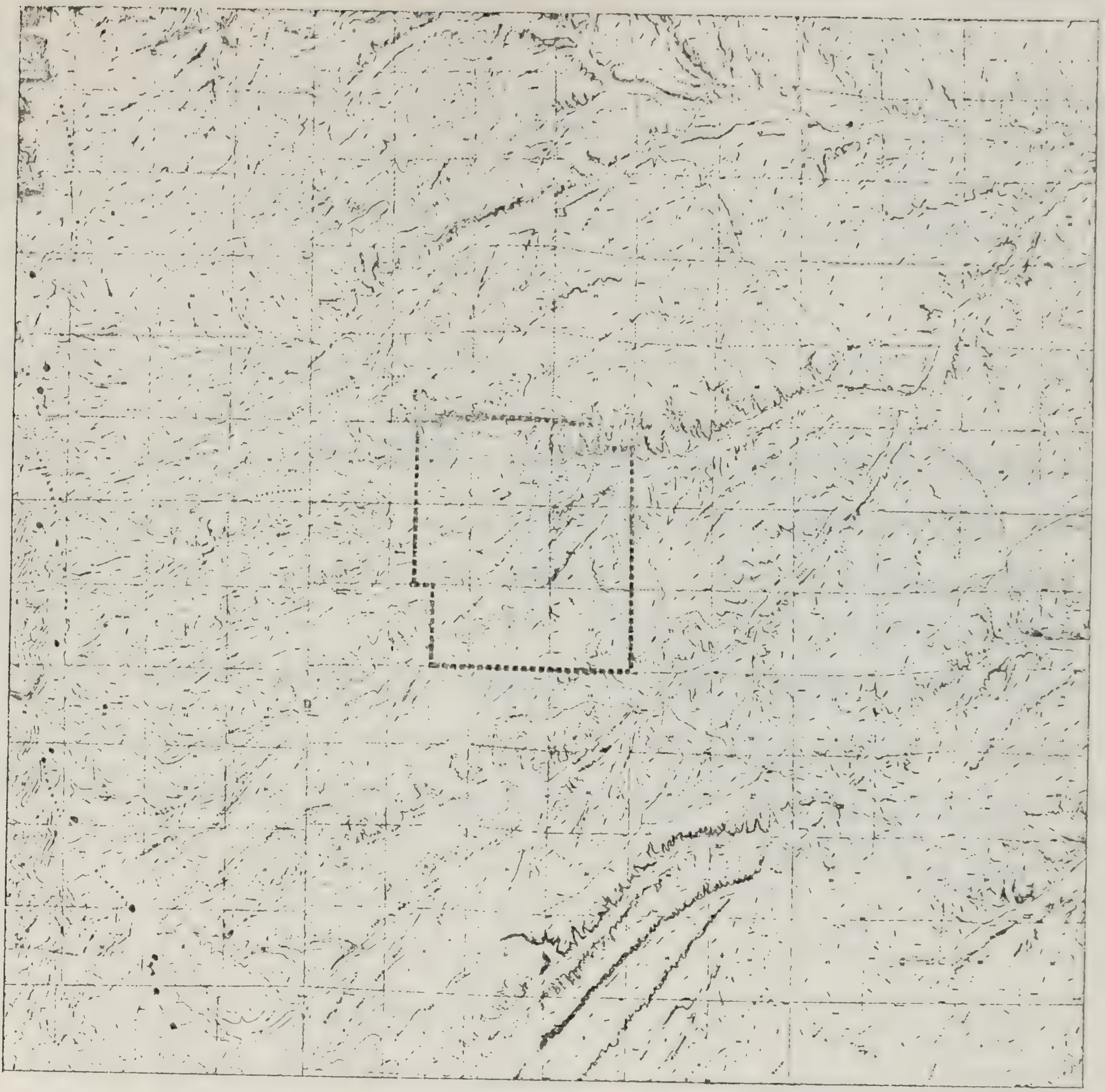
SHOREBIRD AND WATERFOWL COUNT RESULTS - FIELD DATA FORM

Project 83 Date 4/23/76 Observer P.L. Kennerly
Pond Stake Springs Time 1845 - 1900 Wind 0 Temp 9°C
Percent Sky Overcast | Comments QA Check lum 5/5/76

Species	Number Observed					Notes
	Adult			Juv	Unkn	
	M	F	U			
Green-winged teal	𝍸	||||				
Mallard	|||	||||				
Shoveler	|	|				

[illegible] PROGRESS REPORT

FIELD OBSERVATIONS



Species Blue Grouse Survey ______ Date ______ Time ______

Means of Identification ______

Number Observed ______ ♂ ______ ♀ ______

See reverse for additional Information

t ______ Juv. ______

Habitat ______

Other Information* ______

Observer ______

* Include any distinguishing field marks for horses.

Results of blue grouse survey 5/17/76
• = 1 blue grouse
0540 - 0853
wind, start = 1 wind, finish = 1
Sky condition - 0
Temperature, start - 8°C Temperature, finish - 10°C

Results of blue grouse survey 5/20/76
• = 1 blue grouse
wind, start - 3 wind, finish - 4
Sky condition - 2
Temperature, start - 10°C Temperature, finish - 12°C
0545 - 0735

Discontinued after 6.6 miles of survey was completed, due to very high winds.

Results of blue grouse survey 5/25/76
• = 1 blue grouse
0700 - 0845
Wind, start = 1 wind, finish - 2
Sky condition - 2
Temperature, start - 5°C temperature, finish - 11°C

2nd half of survey that was discontinued on 5/20/76. Begun at airplane Ridge road (mile # 6.6).

850 7.4.4.
PF

AERIAL RAPTOR CENSUS REPORT AND SUMMARY FORM

Project/Study 83/66 Date Flown 3/8/76 Survey Area RBOSP

Observers: RF/PL Kennedy LR/CL Kling Pilot/Aircraft Paur / Cessna 206

Time: Start 1220 Finish 1400 Est. ~~Ground~~ Air Speed 85-95 mph Altitude 100-200 f

Weather: Temperature 38°F Wind 2 Percent Cloud Cover 0

Air Calm Light Good Analyst P.L. Kennedy

Species	Number			Location			Notes and Comments
	Adlt.	Imm.	Unkn	Section	Town.	Range	
Common raven	1			1	1S	99W	Transect 5 perched on a pinyon p
olden eagle			1	1	1S	99W	Transect 5 perched on a dead sna
Golden eagle		1		12	2S	99W	Transect 5 soaring over State Springs
Golden eagle		1		7	1S	99W	Transect 6 circling high over Little D
Go[illegible]en eagle		1		23	1S	100W	Transect 12 flying over mixed brush
Golden eagle	1	1		22	1S	100W	Transect 13 perched on a dead snag
							The immature observed on this t
							was probably the same in
							idual observed on Transect

~~[illegible]~~ PE
C.9.4.4.1.1

AERIAL RAPTOR CENSUS REPORT AND SUMMARY FORM

roject/Study 83/66 Date Flown 4/25/76 Survey Area Tract C-a study area

bservers: R front / P.L. Kennedy L rear – C.L. Kling Pilot/Aircraft L. Paur / Cessna

ime: Start 1002 Finish 1146 Est. ~~Ground~~ Air Speed 80-90mph Altitude 100-200 ft

ather: Temperature 57°F Wind 4 ~~Percent Cloud Cover~~ Sky code 3

ir choppy Light poor Analyst P.L. Kennedy / C.L. Kling

Species	Number			Location			Notes and Comments
	Adlt.	Imm.	Unkn	Section	Town.	Range	
mon raven	1			16	1S	98W	N.C.
mon raven	1			23	1S	100W	mixed brush habitat

ECI

83 C9.4.2.2.2

OWL NIGHT COUNT FIELD DATA SHEET

Project 83

Observer P.L. Kennedy

Count Location Tract Ca study area

Time Start 2055

Time Finish 2345

Date 5/15/76

Temp Start 6 °C

Temp Finish 3°C

Sky Condition (ECI Code) 0

Phase of Moon Full Roscoe 1040

Wind Start 2

Wind Finish 4

Route Description As described in First Quarterly Report 6-8-76

The survey was discontinued at stop #15 due to high winds

Stop Number

Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
Short-eared owl	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Saw-whet owl	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

OWL NIGHT COUNT - FIELD DATA SHEET

Project 83

Observer P. L. Kennedy

Count Location Tract C-a study area

Time Start 2130

Time Finish 2350

Date 5/16/76

Temp Start 6° C

Temp Finish 3° C

Sky Condition (ECI Code) 0

Phase of Moon 3/4 moon

Wind Start 2

Wind Finish 1

Route Description As described in First Quarterly Report; However the survey began at stop number 15, the stop at which the survey had been discontinued on the previous night

[illegible] 6-8-76

Stop Number

Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
Great horned owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	-	2
Saw-whet owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Long-eared owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1

43/051076

83 C.7.4.2.2.2

OWL NIGHT COUNT FIELD DATA SHEET

Project 83
Observer P. L. Kennedy
Count Location Tract C-a study area
Time Start 2215
Time Finish 0331
Date 5/17/76
Temp Start 15°C
Temp Finish 9°C
Sky Condition (ECI Code) 0
Phase of Moon ½ Rose at 2420
Wind Start 0
Wind Finish 0
Route Description Same as described in First Quarterly Report

6-8-76

Stop Number

Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
Long-eared owl	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Great horned owl	-	-	-	-	-	1	-	2	-	-	-	-	-	1	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	6
Saw-whet owl	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
Short-eared owl	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Poor-will	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Screech owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Pygmy owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2

2.3.8 Reptiles and Amphibians

2.3.8.3 Results

Three species of amphibians were observed during the breeding survey. They included the chorus frog, spadefoot toad and tiger salamander. A total of 7 individuals was recorded, including 4 chorus frogs, 2 spadefoot toads and one tiger salamander. All were observed either in Corral Gulch or Stake Springs. The surveys were conducted on 17 and 18 May 1976. Raw data is presented in 2.3.8.5.

2.3.8.5

Reptile and Amphibian Raw Data

AMPHIBIANS AND REPTILES

AMPHIBIAN COLLECTION SHEET

Project #: 83

Dat	No.	Species	Sex	Age Class	~~Capture~~ Location	Habitat Description	Observer ~~Collector~~	Additional Notes*
5/17	1	Pseudacris triseriata	♂	A	Corral Gulch	pond	WTT	not collected
		Scaphiopus intermontanus	♂	A	↓	↓	↓	
5/17	2	P triseriata	♂	A	Stake Spgs.	pond	WTT	not collected
		S. intermontanus	♂	A	↓	↓	↓	↓
		A. tigrinum ~~Amb~~	?	A	↓	↓	↓	↓
5/19	3	P. triseriata	♂	A	Corral Gulch	pond	WTT	not collected
	4	↓	♂	A	Stake Spgs.	pond	WTT	" "

*Reproductive condition, stomach contents, tail loss, etc.

RBOSP PROGRESS REPORT

bw 5-25-76

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2.3.9 Invertebrates

Invertebrate samples were collected during the quarter. Identification of specimens and reduction of data are not yet complete, however. These data will be presented next quarter.

2.3.10 Domestic Livestock

2.3.10.3 Results

Livestock distribution patterns were sampled by aerial census on 8, 17 and 29 March and 8 and 25 April. The survey routes are as identified in the October 1975 Scope of Work. A total of 932 cattle were observed and recorded during the five censuses. Approximately 99% of all the animals located were east of the tract in such protected areas as Ryan Gulch and Black Sulphur Creek. The following breakdown, by census area, identifies general patterns:

Date	East	Tract C-a	West	Total
3- 8-76	201	0	0	201
3-17-76	112	3	0	115
3-29-76	149	0	0	149
4- 8-76	215	3	0	218
4-25-76	244	5	0	249
Total	921	11	0	932
% Total	99	1	-	100

Since the censuses were conducted during late winter and/or early spring, the eastern distributional pattern results primarily from herding of the cattle to lower elevations and the more protected areas by ranchers for wintering. These animals will return to the tract as spring turns to summer and the possibility of severe weather (snow storms) passes. Raw data on domestic livestock follows in section 2.3.10.5.

2.3.10.5
Domestic Livestock Raw Data

DOMESTIC LIVESTOCK

File No. 83C 12. 3.1

10/1 +.

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM

Proj/Study 83/62 Date Flown 8 March '76 Species Domestic Livestock Survey Area RBOSP

ervers: RF C.L. Kling LR - P.L. Kennedy Pilot/Aircraft Ken Pour / Cessna

Start 0736 Finish 1007 Ave. Indicated Air Speed 80-85 mph Est. Altitude 150

Counting Conditions: Ground Cover excellent Light excellent Air excelle

Weather: Temp. 10/20 Wind 0/0 Cloud Cover 0/0 Analyst CLK/PLK QA Check [illegible] 3-2

Observations				Location	Notes and Comments
M	F	JUV	U	Transect #	
			2	3 south of Ryan Gulch	
			19	7 Reagle ranch	
			35	2 Black Sulphur Creek	
			90	9 Ryanbulch	
			60	8 Ryan Gulch	

Total Animals Counted: ~~||||~~ 201 ✓

Animal Distribution: Feeding areas

130/060175

File No. 83C6.1.32.2

PF

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1 of 1

Proj/Study 83/62 Date Flown 17 March 76 Species Domestic Cattle Survey Area RBOSP
Observers: R F CL King L R PL Kennedy Pilot/Aircraft Len Paur / Cessna 20
Start 0643 Finish 0917 Ave. Indicated Air Speed 80-85 Est. Altitude 150-200'
Counting Conditions: Ground Cover poor Light poor Air excellent
eather: Temp. 30/35 Wind 1/1 Cloud Cover 3/3 Analyst PLK, CLK QA Check LMW 4-7-76

bservations				Location		Notes and Comments
M	F	JUV	U	Transect		
			10	7	Regal Ranch	corral.
			50	8	W of Regal Ranch	bottom
			2	12	84 mesa	
				13		Cattle in the feeding area N of the survey area.
			1	13	Past Pipeline.	
			33	2	Black Sulphur Creek	
			6	7	Ryan Gulch	
			9	8	Ryan Gulch	
			4	9	Galloway Gulch	
			115			

tal Animals Counted: 115 ✓

imal Distribution: Bottom land meadows

File No. 83C6.1312PE

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1071

Proj/Study 83/62 Date Flown 29 March 76 Species Domestic Livestock Survey Area RBOSP

ervers: R F CL Kling L R PL Kennedy Pilot/Aircraft Len Pow / Cessna 206

Start 0641 Finish 0915 Ave. Indicated Air Speed 75-85 Est. Altitude 50-20

Counting Conditions: Ground Cover poor Light excellent Air excellent

Weather: Temp. 30/25 F Wind 0/1 Cloud Cover 1/1 Analyst PLK CLK QA Check bmm 5-18-

Observations				Location	Notes and Comments
M	F	JUV	U	Transect	
			3	5 Corral Gulch	bottom
			7	7 Reagle Ranch	corral
			58	" "	bottomland.
			60	8 Ryan Gulch	bottomland
			6	11 Duckcreek bottom and	84 mesa
			3	2 Black Sulphur Creek	
			3	7 Ryan Gulch	
			6	8 Ryan Gulch	
			3	11 road along Big Duck Creek	
					transcribed late due to field commitments
			149		

Total Animals Counted: 149

Animal Distribution: mainly in bottomland meadows.

130/060175

File No. 83.C.12.3.1

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1 of 1

roj/Study 83/62 Date Flown 8 April 76 Species Domestic Livestock Survey Area RBOSP

bservers: R F CL Kling L R PL Kennedy Pilot/Aircraft Len Pam / Cessna

tart 0600 Finish 0845 Ave. Indicated Air Speed 75-85 mph Est. Altitude 150-200'

ounting Conditions: Ground Cover poor Light excellent Air excellent

eather: Temp. 32°/40°F Wind W@1 Cloud Cover 1/1 Analyst PLK, CLK QA Check bmw 6-8-76

servations				Location	Notes and Comments
	F	JUV	U	transect	
			2	4 N of Tower	
			1	5 Ryan Gulch Meadow	
			65	7 W of Ragle Ranch	
			30	8 W of last herd W of Ragle Ranch	meadow type
					most have calves by now
			3	11 bottom of Big Duck Creek	
			2	meadow by Stake Springs Cabin	
			7	end of transect	
			35	1 Black Sulphur Creek	
			20	3 Black Sulphur Creek	
			1	6 Ryan Gulch	
			17	7 Ryan Gulch	
			2	8 Ryan Gulch	
			30	10 Duck Creek	
			1	12 → Ryan Gulch	
			2	Stake Springs Draw	
			2	north of Little Duck Creek	outside of study area.
			50	13 Little Duck Creek	outside of study area
					transcribed late due to field commitments
			270	page total ✓	

tal Animals Counted: 218 on study area 52 off to north.

mal Distribution:

[illegible]

File No. 83 C.12.3.1

LARGE MAMMAL AERIAL CENSUS REPORT AND DATA SUMMARY FORM 1 of 1

Proj/Study 83/62 Date Flown 25 April 76 Species livestock Survey Area RBOSP

Observers: R F C Kling L R P L Kennedy Pilot/Aircraft L. Pace / Cessna 182

Start 0728 Finish 0949 Ave. Indicated Air Speed 75-85 mph Est. Altitude 150-2

Counting Conditions: Ground Cover poor Light fair Air fair

Weather: Temp. 45/45 Wind 5-10 3 Cloud Cover 2/3 Analyst PLK/CCK QA Check bm 6-2-

Observations M	F.	JUV	U	Location	Notes and Comments
				transect	
			56	1 Duckett Ranch	
			75	7 Reagle Ranch meadow	numerous calves
			70	8 " " "	" "
			5	9 near end near windmill	
			5	14 S of Little Duck	
			18	1 Black Sulphur Creek	
			11	8 Ryan Gulch - 7 in the east-west section of Ryan Gulch; 4 in the drainage that runs NE to SW.	
			1	10 road along Hunk Ridge just other side of Dry Ryan Gulch	
1			3	11 12 right fork of State Springs Draw - adjacent to the impoundment	cow on ridge near road along Dry Ryan Gulch; cow + calf on ridge south of Ryan Gulch
		1	3	13 Little Duck Creek	
		1	247		

Total Animals Counted: 249

Animal Distribution: mapped

130/060175

2.3.11 Remote Sensing

2.3.11.3 Results

Aerial photographs have been arranged in flight lines. Remote sensing analysis is underway.

2.3.12 Threatened and Endangered Species

2.3.12.3 Results

2.3.12.3.1 Sandhill Crane Studies

The greater sandhill crane (*Grus canadensis tabida*) is considered by the Colorado State Wildlife Commission (1973) to be an endangered species if found nesting within the state. This status applies only to the Colorado nesting population and does not apply to birds found feeding within the state or birds found migrating through the state.

Observations of sandhill cranes in the vicinity of Calamity Ridge and Little Duck Creek (17 April 1975) and 84 Mesa (25-30 April 1975) led to the initiation of special sandhill crane studies in the spring of 1975. These studies were continued during the fall of 1975 and were resumed during this reporting quarter.

The spring 1976 sandhill crane studies were initiated on 28 March 1976 and completed on 7 May 1976. The purpose of these surveys was to determine whether the birds returned to 84 Mesa or adjacent areas during the spring migration. The spring studies involved aerial, vehicle and foot surveys. Areas surveyed included 84 Mesa, Tract C-a, Stake Springs Draw, Corral Gulch, Yellow Creek, Duck Creek, Ryan Gulch, Piceance Creek and the White River.

These surveys were performed with the cooperation of the U.S. Bureau of Sport Fisheries and Wildlife, Monte Vista Wildlife Refuge and in conjunction with ongoing BLM sandhill crane studies (Mike Getman) within the Piceance Basin. Dr. Walt Graul (non-game bird biologist, Colorado Division of Wildlife) and Dr. Rod Drewien (Idaho Cooperative Wildlife Unit) were given tours of the Tract C-a area to aid both men in the formulation of an opinion on the status of the birds within the area.

No sandhill cranes were observed in the vicinity of Tract C-a during the spring surveys. One crane, however, was observed in the vicinity of Meeker. It appears, therefore, that 84 Mesa is not an important migratory stopover for cranes.

2.3.12.3.2 Opportunistic Sightings

Sandhill cranes were observed on two occasions within the 5-mile perimeter baseline study area during this reporting quarter. The first sighting was on the evening of 26 April 1976 at Stake Springs Pond. Two birds were observed feeding and preening by ECI biologists. The same two birds were observed the following morning and were last observed around 0945 hours flying northward. A storm front, which passed through the evening before, was the probably causative factor for the migrants' stopover at Stake Springs Pond.

On the morning of 3 May 1976, at 0810 hours, ECI biologists sighted four greater sandhill cranes and one whooping crane flying northeast of 84 Ranch. The birds subsequently landed in the hay meadow 2 km northeast of 84 Ranch. The birds had left the area by 1045 hours (Getman, 1976, page 22), apparently resuming their migratory flight northwest.

Getman (1976, page 22), in his report on the status of sandhill cranes in Piceance Basin, lists two other sightings in the region. The first sighting of two birds occurred during the first week of April. The birds were sighted 2 km north of the confluence of Piceance Creek and Ryan Gulch. The second sighting took place the evening of 25 April and the morning of 26 April in a hay meadow in Yellow Creek, approximately 14.5 km (9 mi) northeast of Tract C-a. The 30-40 birds seen feeding in the meadow resumed their migration on 26 April.

2.3.12.3.3 Whooping Crane (*Grus americana*)

The whooping crane observed near 84 Ranch was the first sighting of this species, both for the RBOSP terrestrial baseline program and for northwestern Colorado. The bird sighted is one product of an international experiment presently being conducted by biologists in Canada and the United States. The overall objective of the experiment is to see whether or not a second separate flock of whooping cranes can be established by transplanting whooping crane eggs under sandhill cranes for hatching and rearing by sandhill cranes. It is hoped that this will increase the chances of survival of the whooping crane.

Whooping cranes were introduced into the Rocky Mountain population of sandhill cranes last spring. Whooping crane eggs were taken from nests in Canada and placed in sandhill crane nests at Gray's Lake, Idaho. Sandhill cranes, acting as "foster parents", raised the whooping crane chicks. The whooping crane observed near 84 Ranch is believed to be one of the four whooping cranes known to survive the first year of the transplant experiment. If the overall sandhill cranewhooping crane foster parent program proves to be a success, more sightings of whooping cranes will probably occur in northwestern Colorado.

Sighting of the whooping crane in the 84 Mesa area indicates that sandhill cranes migrate through the Piceance Basin as they fly to areas north of Colorado, and are not part of the Colorado nesting population.

LITERATURE CITED

Colorado Wildlife Commission. 1973. Position statement concerning endangered species. 22 March 1973.

Getman, M. 1976. Status of greater sandhill cranes in Piceance Basin. Unpublished BLM report. July 1976. 39pp.

2.3.15 Browse Condition and Utilization

2.3.15.3 Results

The browse condition and utilization program is concentrating on two major vegetation types of the Tract C-a study area, pinyon-juniper and mixed brush. Sampling was conducted in late April 1976 on 100 sampling locations. These locations were predetermined by examination of phytosociological vegetation maps and consequent selection of sampling sites which supported a preponderance of the key browse species of particular interest. Key species include: juniper (*Juniperus osteosperma*), pinyon (*Pinus edulis*), bitterbrush (*Purshia tridentata*), serviceberry (*Amelanchier* sp.), chokecherry (*Prunus virginiana*) and snowberry (*Symphoricarpos oreophilus*).

The data collected in April 1976 is presently being analyzed for availability, form class, age class, hedging classification and leader use estimates. Consequently, the browse condition and utilization levels of the study area can be determined and used to ascertain whether carrying capacities of current game ranges are in balance with existing deer populations. This analysis will be reported in the final report.

Raw data are presented in the following section, 2.3.15.5.

2.3.15.5

Browse Condition and Utilization Raw Data

BROWSE CONDITION AND UTILIZATION

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J (sage understory) Sample Unit #: I

T 1S R 98W S 19 1/4 1/4 S NE/SE Date: 4/26/76

Aspect (degrees) 100° Slope (degrees) 15 Elevation (feet) ≅ 6500

Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Juniper	4	M	5	N/A	<5%
2	sagebrush	1	M	5		100%
3	Juniper	4	M	5		5%
4	sagebrush	1	M	5		100%
5	sagebrush	1	M	5		100%
6	sagebrush	2	M	25		100%
7	sagebrush	1	M	5		100
8	Juniper	5	M	25		30
9	sagebrush	1	D	5		100
10	sagebrush	1	M	5		100
11	sagebrush	2	M	25		100
12	sagebrush	1	M	5		100
13	sagebrush	1	M	5		100
14	sagebrush	1	M	5		100
15	Juniper	1	Y	5		100
16	sagebrush	2	M	25		100
17	rabbitbrush	1	M	5		100
18	sagebrush	1	M	5		100
19	sagebrush	1	M	5		100
20	Sagebrush	1	M	5		100
21	sagebrush	1	D	5		100
22	Juniper	1	M	5		100
23	Sagebrush	1	D	5		100
24	sagebrush	1	M	5		100
25	Juniper	4	M	5		<5%

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J (sage understory) Sample Unit #: 2

T 1S R 98W S 29 1/4 1/4 S NW/NW Date: 4/26/76

Aspect (degrees) 136 Slope (degrees) 4 Elevation (feet) 6500

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	juniper	5	M	25	N/A	5%
2	rabbitbrush	1	M	5		100
3	sagebrush	1	M	5		100
4	sagebrush	1	D	5		100
5	sagebrush	1	M	5		100
6	sagebrush	1	M	5		100
7	sagebrush	1	M	5		[illegible]
8	juniper	1	Y	0		100
9	rabbitbrush	1	M	5		100
10	rabbitbrush	1	M	5		100
11	sagebrush	1	M	5		100
12	sagebrush	1	Y	5		100
13	sagebrush	1	M	5		100
14	juniper	4	M	5		5
15	[illegible]	1	M	5		100
16	juniper	7	M	0		0
17	juniper	5	M	25		50
18	sagebrush	1	M	5		100
19	[illegible]	3	M	25		100
20	rabbitbrush	1	M	5		100
21	juniper	4	D	5		50
22	juniper	2	M	25		100
23	juniper	4	M	25		50
24	juniper	7	M	25		25
25	sagebrush	1	Y	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J (sage) Sample Unit #: 3

T 1S R 98W S 18 1/4 1/4 S SW/SW Date: 4/26/76

Aspect (degrees) 155 Slope (degrees) 25 Elevation (feet) 6500

Field Analyst(s): Turner QA Check: bm 5/4/76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	sagebrush	1	M	5	N/A	100%
2	[illegible]	1	Y	5		100
3	juniper	4	D	5		50
4	[illegible]	1	M	5		100
5	[illegible]	1	M	5		100
6	[illegible]	1	M	5		100
7	[illegible]	1	M	5		[illegible]
8	[illegible]	1	D	0		0
9	[illegible]	1	Y	5		100
10	[illegible]	2	Y	25		100
11	[illegible]	1	Y	5		100
12	[illegible]	1	Y	5		100
13	[illegible]	1	M	[illegible]		100
14	[illegible]	1	M	[illegible]		100
15	[illegible]	[illegible]	M	5		100
16	[illegible]	1	D	5		100
17	[illegible]	1	D	5		[illegible]
18	[illegible]	4	M	5		10
19	[illegible]					
20	[illegible]	1	M	[illegible]		50
21	[illegible]	[illegible]	Y	[illegible]		[illegible]
22	[illegible]	[illegible]	Y	5		100
23	[illegible]	1	M	5		100
24	[illegible]	1	D	5		100
25	[illegible]	1	M	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-S (sage) Sample Unit #: 4

T 1S R 99W S 13 1/4 1/4 S SW/SW Date: 4/26/76

Aspect (degrees) 95° Slope (degrees) < 5 Elevation (feet) 6600

Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	juniper	4	M	5	N/A	15%
2	juniper	5	M	25	1	15
3	sagebrush	1	M	5		100
4	sagebrush	1	M	5		100
5	pinyon	5	M	25		35
6	rabbitbrush	1	M	5		100
7	pinyon	4	M	5		15
8	juniper	1	Y	5		100
9	juniper	4	M	5		45
10	sagebrush	1	Y	5		100
11	sagebrush	1	M	5		100
12	rabbitbrush	1	M	5		100
13	sagebrush	1	M	5		100
14	juniper	4	M	5		80
15	rabbitbrush	2	M	25		100
16	juniper	1	Y	5		100
17	juniper	4	M	5		25
18	juniper	4	M	5		30
19	juniper	2	Y	25		100
20	rabbitbrush	1	M	5		100
21	juniper	4	D	5		10
22	juniper	4	M	5		5
23	juniper	4	M	5		10
24	sagebrush	1	M	5		100
25	sagebrush	1	M	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J (sage)

T 13 R 99W S 13 1/4 1/4 S NW/SW Date: 4/26/76 Sample Unit #: 5

Aspect (degrees) 130° Slope (degrees) <5 Elevation (feet) 6600

Field Analyst(s): Turner

QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	juniper	1	M	S	N/A	100%
2	sagebrush	1	Y	S		100
3	sagebrush	1	M	S		100
4	sagebrush	1	M	S		100
5	sagebrush	1	M	S		100
6	juniper	7	M	O		0
7	sagebrush	1	Y	S		100
8	sagebrush	1	Y	S		100
9	sagebrush	1	M	S		100
10	sagebrush	1	M	S		100
11	sagebrush	2	M	25		100
12	sagebrush	1	D	S		100
13	sagebrush	1	M	S		100
14	sagebrush	1	M	S		100
15	sagebrush	2	M	25		100
16	sagebrush	1	M	S		100
17	sagebrush	1	M	S		100
18	sagebrush	1	Y	S		100
19	sagebrush	1	M	S		100
20	juniper	4	M	S		10
21	sagebrush	1	M	S		100
22	sagebrush	1	M	S		100
23	sagebrush	1	D	S		100
24	sagebrush	1	M	S		100
25	sagebrush	1	m	S		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J (sage) Sample Unit #: 6
T 1S R 99W S 11 1/4 1/4 S SW/SE Date: 7/26/7
Aspect (degrees) 90° Slope (degrees) 2° Elevation (feet) 6600
Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	juniper	I	M	S	N/A	100%
2	juniper	4	M	S		90%
3	pinyon	1	M	S		100
4	sagebrush	1	M	S		100
5	pinyon	I	Y	S		100
6	juniper	I	Y	S		100
7	sagebrush	I	M	S		100
8	sagebrush	1	M	S		100
9	rabbitbrush	2	M	S		100
10	juniper	4	M	S		70
11	juniper	4	M	S		70
12	juniper	4	M	S		60
13	greasewood	1	M	0		100
14	rabbitbrush	1	M	S		100
15	sagebrush	2	M	25		100
16	juniper	4	M	S		50
17	juniper	1	M	S		100
18	juniper	1	Y	S		100
19	sagebrush	1	D	S		100
20	sagebrush	1	Y	S		100
21	sagebrush	1	M	S		100
22	sagebrush	1	D	S		100
23	sagebrush	1	D	S		100
24	juniper	4	M	S		70
25	sagebrush	1	D	S		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J (mixed) Sample Unit #: 7

T 1S R 99W S 12 1/4 1/4 S SW/NE Date: 4/26/76

Aspect (degrees) 120° Slope (degrees) 25 Elevation (feet) 6500

Field Analyst(s): Turner QA Check: bon 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	BitterBrush	3	M	95	N/A	100%
2	Juniper	1	M	5		100
3	serviceberry	3	M	95		100
4	pinyon	4	M	5		40
5	pinyon	4	M	5		45
6	juniper	4	M	5		36
7	Sagebrush	1	M	5		100
8	Sagebrush	1	M	5		100
9	bitterbrush	3	M	95		100
10	sagebrush	1	Y	5		100
11	sagebrush	1	Y	5		100
12	Sagebrush	1	S	5		100
13	juniper	4	M	5		80
14	Sagebrush	1	M	5		100
15	juniper	4	M	5		50
16	Sagebrush	1	D	5		100
17	pinyon	5	M	25		20
18	bitterbrush	3	M	95		100
19	horsebrush	2	M	25		100
20	pinyon	4	M	5		35
21	horsebrush	1	M	5		100
22	pinyon	5	M	25		70
23	horsebrush	2	M	25		100
24	juniper	1	S	5		100
25	pinyon	5	M	25		60

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J ([illegible]) Sample Unit #: 8

T 1S R 98W S 9 1/4 1/4 S NW/SE Date: 4-26-76

Aspect (degrees) 40 Slope (degrees) [illegible] Elevation (feet) 6350

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	3	M	95	N/A	100
2	horsebrush	1	M	5		100
3	serviceberry	3	M	95		100
4	serviceberry	3	D	95		100
5	serviceberry	3	M	95		100
6	serviceberry	3	M	95		100
7	serviceberry	3	M	95		100
8	pinyon	1	M	5		100
9	serviceberry	3	M	95		100
10	juniper	1	S	5		100
11	serviceberry	3	M	95		100
12	pinyon	2	M	25		100
13	juniper	1	M	5		100
14	serviceberry	3	M	95		100
15	serviceberry	2	M	75		100
16	serviceberry	3	M	95		100
17	serviceberry	3	M	95		100
18	serviceberry	3	M	95		100
19	serviceberry	3	M	95		100
20	serviceberry	3	M	95		100
21	pinyon	1	M	5		100
22	pinyon	1	Y	5		100
23	serviceberry	3	M	95		100
24	serviceberry	2	M	75		100
25	serviceberry	3	Y	95		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J (M-S) Sample Unit #: 9

T 1S R 98W S 9 1/4 1/4 S NE/SW Date: 4/26/76

Aspect (degrees) 360° Slope (degrees) 5° Elevation (feet) 6350

Field Analyst(s): Turner QA Check: lum 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	3	M	95	N/A	100%
2	rabbitbrush	1	D	S		100
3	rabbitbrush	1	M	S		100
4	serviceberry	6	M	95		90
5	sagebrush	1	D	S		100
6	rabbitbrush	1	M	S		100
7	rabbitbrush	1	M	S		100
8	rabbitbrush	1	M	S		100
9	Serviceberry	3	M	95		100
10	serviceberry	3	Y	95		100
11	sagebrush	1	M	S		100
12	juniper	4	M	S		15
13	Rabbitbrush	1	Y	S		100
14	juniper	1	D	S		100
15	Rabbitbrush	1	M	S		100
16	Sagebrush	1	M	S		100
17	Sagebrush	1	M	S		100
18	juniper	4	M	S		35
19	Sagebrush	1	M	S		100
20	Serviceberry	3	Y	95		100
21	Sagebrush	1	M	S		100
22	juniper	7	D	0		0
23	Sagebrush	1	M	S		100
24	juniper	4	M	S		10
25	rabbitbrush	1	M	S		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J (mixed) Sample Unit #: 10
T 1S R 98W S 9 1/4 1/4 S NE/SW Date: 4/26/76
Aspect (degrees) 10° Slope (degrees) <5 Elevation (feet) 6350
Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	3	M	95	N/A	100%
2	pinyon	2	M	25		100
3	Serviceberry	3	M	95		100
4	serviceberry	3	m	95		100
5	serviceberry	3	M	95		100
6	juniper	5	O	25		15
7	sagebrush	1	M	5		100
8	pinyon	2	m	50		100
9	~~sag~~ pinyon	1	S	5		100
10	serviceberry	3	M	95		100
11	serviceberry	3	m	95		100
12	~~p~~ juniper	4	M	5		5
13	serviceberry	3	M	95		100
14	juniper	1	Y	5		100
15	pinyon	2	M	75		100
16	juniper	1	M	5		100
17	juniper	1	M	25		100
18	pinyon	3	M	95		100
19	Bitterbrush	3	M	95		100
20	serviceberry	3	m	95		100
21	juniper	1	m	5		100
22	serviceberry	3	m	95		100
23	serviceberry	3	Y	95		100
24	serviceberry	3	Y	95		100
25	serviceberry	3	Y	95		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J (sage) Sample Unit #: 11
T 1S R 98W S 31 1/4 1/4 S SE/NE Date: 4/26/76
Aspect (degrees) 130 Slope (degrees) 10 Elevation (feet) 6500
Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	pinyon	4	M	S	N/A	90
2	juniper	4	M	S		15
3	pinyon	4	M	S		15
4	rabbitbrush	1	M	S		100
5	rabbitbrush	1	M	S		100
6	juniper	4	M	S		90
7	rabbitbrush	1	M	S		100
8	shadscale	1	M	0		100
9	juniper	4	M	S		70
10	shadscale	1	M	0		100
11	pinyon	1	M	S		100
12	sagebrush	1	M	S		100
13	rabbitbrush	1	M	S		100
14	juniper	4	M	S		30
15	sagebrush	1	M	S		100
16	sagebrush	1	Y	S		100
17	sagebrush	1	M	S		100
18	sagebrush	1	M	S		100
19	sagebrush	1	M	S		100
20	rabbitbrush	1	M	S		100
21	sagebrush	1	Y	S		100
22	juniper	4	M	S		20
23	sagebrush	1	D	S		100
24	juniper	1	Y	S		100
25	sagebrush	1	M	S		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 12

T 2S R 98W S 6 1/4 1/4 S NW/NW Date: 4/26/76

Aspect (degrees) 130 Slope (degrees) 10 Elevation (feet) 6650

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	pinyon	4	M	S	N/A	60%
2	rabbitbrush	1	M	S		100
3	rabbitbrush	1	M	S		100
4	rabbitbrush	1	M	S		100
5	rabbitbrush	1	M	S		100
6	pinyon	1	M	S		100
7	rabbitbrush	1	M	S		100
8	rabbitbrush	1	M	S		100
9	pinyon	1	Y	S		100
10	rabbitbrush	1	Y	S		100
11	rabbitbrush	1	D	S		100
12	sagebrush	1	M	S		100
13	juniper	4	M	S		15
14	juniper	4	M	S		25
15	sagebrush	1	M	S		100
16	rabbitbrush	1	Y	S		100
17	rabbitbrush	1	Y	S		100
18	pinyon	1	M	S		100
19	pinyon	1	M	S		100
20	pinyon	1	M	S		100
21	rabbitbrush	1	D	S		100
22	pinyon	1	M	S		100
23	pinyon	1	M	S		100
24	pinyon	1	M	S		100
25	pinyon	1	M	S		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J (sage) Sample Unit #: 13

T 1S R 99W S 9 1/4 1/4 S NW/NE Date: 4/27/76

Aspect (degrees) 190 Slope (degrees) 5 Elevation (feet) 6450

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	juniper	4	M	5	N/A	10%
2	juniper	4	M	5		15
3	sagebrush	1	M	5		100
4	rabbitbrush	1	M	5		100
5	juniper	4	M	5		10
6	sagebrush	1	M	5		100
7	sagebrush	1	M	5		100
8	sagebrush	1	D	5		100
9	rabbitbrush	1	M	5		100
10	sagebrush	1	M	5		100
11	sagebrush	1	D	5		100
12	sagebrush	1	M	5		100
13	sagebrush	1	M	5		100
14	juniper	4	M	5		15
15	sagebrush	1	M	5		100
16	juniper	4	M	5		15
17	rabbitbrush	1	M	5		100
18	pinyon	5	M	25		15
19	sagebrush	1	D	5		100
20	sagebrush	1	M	5		100
21	rabbitbrush	1	M	5		100
22	juniper	4	D	5		20
23	sagebrush	1	D	5		100
24	juniper	1	Y	5		100
25	sagebrush	1	D	5		100

RBOSP PROGRESS REPORT

83C1.3.1 PF

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J (sage) Sample Unit #: 14
T 1S R 93W S 8 1/4 1/4 S NE/NE Date: 4/27/76
Aspect (degrees) 100 Slope (degrees) 5 Elevation (feet) 6400
Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	juniper	4	M	5	NA	3 70
2	sagebrush	1	D	5		100
3	pinyon	5	M	50		20
4	sagebrush	1	M	5		100
5	sagebrush	1	D	5		100
6	pinyon	6	M	95		50
7	pinyon	3	M	95		100
8	pinyon	2	M	25		100
9	sagebrush	1	Y	5		100
10	juniper	4	M	5		15
11	rabbitbrush	1	D	5		100
12	rabbitbrush	1	M	5		100
13	sagebrush	3	D	25		100
14	juniper	4	D	5		5
15	sagebrush	1	M	5		100
16	sagebrush	1	M	5		100
17	sagebrush	1	M	5		100
18	rabbitbrush	1	M	5		100
19	rabbitbrush	1	M	5		100
20	pinyon	1	S	0		100
21	juniper	4	M	5		15
22	sagebrush	1	M	5		100
23	sagebrush	1	M	5		100
24	juniper	4	M	5	Y	30
25	sagebrush	1	M	5		100

83C1.3.1 Pt

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J
Sample Unit #: 15
T 1S R 43W S 7 1/4 1/4 S NE/NE Date: 4/26/76
Aspect (degrees) 90 Slope (degrees) 10 Elevation (feet) 640
Field Analyst(s): Thurper
QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	3	M	95	N/A	100
2	serviceberry	2	M	75		100
3	rabbitbrush	1	M	5		100
4	rabbitbrush	1	M	5		100
5	rabbitbrush	1	M	5		100
6	horsebrush	1	M	5		100
7	rabbit brush	1	M	5		100
8	juniper	4	M	5		20
9	juniper	4	M	5		15
10	[illegible]	1	M	5		100
11	rabbitbrush	1	M	5		100
12	rabbitbrush	1	Y	5		100
13	sagebrush	1	M	5		100
14	pinyon	1	M	5		100
15	rabbitbrush	1	O	5		100
16	sagebrush	2	M	25		100
17	sagebrush	1	M	5		100
18	sagebrush	1	M	5		100
19	juniper	4	M	5		40
20	sagebrush	1	O	5		100
21	rabbitbrush	1	Y	5		100
22	sagebrush	1	M	5		100
23	rabbitbrush	1	M	5		100
24	shadscale	1	M	5		100
25	sagebrush	1	M	5		100

RBOSP PROGRESS REPORT

83C.1.3.1 PF

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J
Sample Unit #: 16
T 15 R 9W S 12 1/4 1/4 S NE/NE Date: 4/27/76
Aspect (degrees) 130 Slope (degrees) 7 Elevation (feet) 6500
Field Analyst(s): Turner
QA Check: bun 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	3	M	95	N/A	100%
2	rabbitbrush	1	M	5		100
3	sagebrush	1	m	5		100
4	shadscale	1	m	0		100
5	Shadscale	1	m	0		100
6	Sagebrush	1	M	5		100
7	juniper	1	M	5		100
8	Serviceberry	3	m	95		100
9	serviceberry	3	m	98		100
10	rabbitbrush	2	M	25		100
11	Shadscale	1	M	0		100
12	juniper	4	m	5		25
13	juniper	4	M	5		25
14	rabbitbrush	1	m	5		100
15	juniper	4	m	5		40
16	shadscale	1	m	0		100
17	pinyon	5	m	25		10
18	serviceberry	3	m	95		100
19	Serviceberry	3	m	95		100
20	Shadscale	1	m	0		100
21	Juniper	4	m	5		60
22	Sagebrush	1	m	5		100
23	serviceberry	2	M	50		100
24	Serviceberry	2	m	50		100
25	rabbitbrush	1	m	5		100

RBOSP PROGRESS REPORT

83C1.3.1 PL

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 17

T 1S R 94W S 11 1/4 1/4 S NW/NE Date: [illegible]

Aspect (degrees) 1?0 Slope (degrees) 1? Elevation (feet) [illegible]

Field Analyst(s): [illegible] QA Check: hrn 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	sagebrush	1	M	5	N|H	100
2	serviceberry	3	M	95		100
3	Serviceberry	2	Y	50		100
4	serviceberry	3	M	95		100
5	Shadscale	1	M	0		100
6	rabbitbrush	1	M	5		100
7	rabbitbrush	1	M	5		100
8	sagebrush	1	M	5		100
9	pinyon	4	M	5		10
10	sagebrush	1	M	5		100
11	sagebrush	1	M	5		100
12	Serviceberry	3	M	95		100
13	Rabbitbrush	1	Y	5		100
14	juniper	4	M	5		5
15	juniper	5	M	25		10
16	serviceberry	2	M	50		100
17	juniper	4	M	5		20
18	sagebrush	1	M	5		100
19	serviceberry	3	M	95		100
20	pinyon	1	S	5		100
21	serviceberry	3	M	95		100
22	sagebrush	1	Y	5		100
23	serviceberry	3	M	95		100
24	sagebrush	1	D	5		100
25	juniper	4	M	5		20

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RBOSP PROGRESS REPORT

03C1.3.1 FF

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 18

T 1S R 99W S 11 1/4 1/4 S SWNE Date: 4-27-76

Aspect (degrees) 120 Slope (degrees) 10 Elevation (feet) 6500

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	3	M	95	N/A	100%
2	pinyon	1	Y	0		100
3	serviceberry	3	m	95		100
4	pinyon	1	Y	0		100
5	pinyon	5	Y	25		.30
6	serviceberry	3	m	95		100
7	serviceberry	3	m	95		100
8	serviceberry	3	M	95		100
9	serviceberry	3	m	95		100
10	pinyon	5	M	25		35
11	serviceberry	3	m	95		100
12	serviceberry	3	m	95		100
13	serviceberry	3	m	95		100
14	Shadscale	1	m	0		100
15	juniper	4	M	5		.30
16	serviceberry	3	m	95		100
17	sagebrush	1	m	3		100
18	[illegible]	1	m	5		100
19	sagebrush	1	m	5		100
20	Serviceberry	2	m	75		100
21	[illegible]	1	m	5		100
22	Serviceberry	1	Y	5		100
23	Serviceberry	3	m	95		100
24	Serviceberry	3	m	95		100
25	sagebrush		m	5		100

RBOSP PROGRESS REPORT

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 19

T 1S R 99W S 11 1/4 1/4 S SW/NE Date: [illegible]

Aspect (degrees) 110 Slope (degrees) 3 Elevation (feet) 6500

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	3	M	95	N/A	100
2	pinyon	5	M	25		95
3	serviceberry	3	M	95		100
4	sage	1	M	5		100
5	sage	1	D	5		100
6	shadscale	1	M	5		100
7	pinyon	4	M	5		5
8	serviceberry	3	M	95		100
9	sage	1	M	5		100
10	serviceberry	3	M	95		100
11	serviceberry	3	M	95		100
12	serviceberry	3	M	95		100
13	serviceberry	3	D	95		100
14	juniper	1	M	5		100
15	pinyon	4	M	5		55
16	serviceberry	3	M	95		100
17	serviceberry	3	M	95		100
18	serviceberry	3	D	95		100
19	juniper	1	[illegible]	5		100
20	serviceberry	3	M	95		100
21	serviceberry	3	M	95		100
22	pinyon	5	M	25		20
23	serviceberry	3	M	75		100
24	serviceberry	3	M	95		100
25	juniper	4	M	5		100

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 20

T 1S R 99W S 11 1/4 1/4 S SE|NW Date: 4/27/76

Aspect (degrees) 130 Slope (degrees) 5 Elevation (feet) 6500

Field Analyst(s): Turner QA Check: Lm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	3	M	95	N.A	100 %
2	juniper	1	M	5		100
3	serviceberry	2	M	75		100
4	serviceberry	2	M	75		100
5	pinyon	5	M	25		15
6	serviceberry	2	M	75		100
7	serviceberry	3	M	95		100
8	rabbitbrush	2	M	75		100
9	serviceberry	3	M	95		100
10	serviceberry	3	M	95		100
11	Serviceberry	3	M	95		100
12	Serviceberry	3	M	95		100
13	serviceberry	3	M	95		100
14	serviceberry	3	M	95		100
15	pinyon	1	S	0		100
16	Sagebrush	1	M	5		100
17	serviceberry	3	M	95		100
18	Sagebrush	1	M	5		100
19	Sage	1	M	5		100
20	Sage	1	M	5		100
21	serviceberry	3	M	95		100
22	serviceberry	2	M	50		100
23	horsebrush	1	M	5		100
24	serviceberry	3	M	95		100
25	serviceberry	3	M	[illegible]		100

83C1.3.1 P

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P - J

Sample Unit #: 2

T 15 R 99W S 11 1/4 1/4 S NE/SW Date: [illegible]

Aspect (degrees) [illegible] Slope (degrees) 5 Elevation (feet) 6500

Field Analyst(s): Turner

QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	pinyon	3	M	25	[illegible]	35
2	serviceberry	3	M	25		100
3	juniper	5	m	25		20
4	serviceberry	3	m	95		100
5	[illegible]	3	D	95		[illegible]
6	serviceberry	2	m	[illegible]		100
7	juniper	3	M	25		20
8	bitterbrush	1	m	0		100
9	serviceberry	3	m	[illegible]		100
10	serviceberry	3	m	95		100
11	serviceberry	3	m	95		100
12	pinyon	1	Y	5		100
13	saltbush	4	M	50		95
14	saltbush	4	m	60		60
15	saltbush	1	Y	5		100
16	saltbush	1	M	5		100
17	saltbush	1	m	5		100
18	juniper	4	m	5		15
19	serviceberry	3	m	95		100
20	sage	1	M	5		100
21	juniper	4	m	5		[illegible]
22	serviceberry	3	m	95		100
23	serviceberry	3	m	[illegible]		100
24	[illegible]	1	m	0		100
25	serviceberry	3	m	95		[illegible]

RBOSP PROGRESS REPORT

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 22

T 1S R 99W S 11 1/4 1/4 S NW/SW Date: [illegible] 27 75

Aspect (degrees) 110 Slope (degrees) 5 Elevation (feet) 6500

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	juniper	4	M	5	N/A	40%
2	sage	1	M	5		100
3	shadscale	1	M	0		100
4	sage	1	Y	5		100
5	sage	1	M	5		100
6	serviceberry	2	M	25		100
7	serviceberry	2	M	25		100
8	juniper	1	M	5		100
9	sage	1	O	5		100
10	serviceberry	2	M	25		100
11	pinyon	2	M	50		100
12	juniper	4	M	5		50
13	juniper	1	M	5		100
14	sage	1	D	5		100
15	sage	1	M	5		100
16	sage	1	M	5		100
17	~~juniper~~ juniper	4	M	5		5
18	sage	1	Y	5		100
19	juniper	4	M	5		15
20	[illegible]	2	M	25		[illegible]
21	[illegible]	1	Y			100
22	[illegible]	1	M	[illegible]		[illegible]
23	[illegible]	1	M	5		[illegible]
24	juniper	4	D	5	↓	20
25	[illegible]	1	M	5		100

83C1.3.1 PF

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P - J Sample Unit #: 23

T 1S R 99W S 15 1/4 1/4 S NW/SE Date: [illegible]

Aspect (degrees) 70 Slope (degrees) 45 Elevation (feet) 6850

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	pinyon	1	M	5	NA	100 %
2	juniper	4	M	5		15
3	pinyon	4	M	5		85
4	pinyon	1	M	5		100
5	sage	1	M	5		100
6	juniper	4	M	5		5
7	pinyon	4	M	5		5
8	pinyon	4	M	5		10
9	juniper	4	M	5		5
10	pinyon	5	M	25		55
11	pinyon	5	M	25		45
12	juniper	4	C	5		30
13	pinyon	4	M	5		10
14	pinyon	④	M	25		25
15	pinyon	4	M	5		10
16	pinyon	4	M	5		10
17	pinyon	4	M	5		10
18	pinyon	4	M	25		15
19	pinyon	1	M	25		100
20	bitterbrush	3	M	55		100
21	bitterbrush	3	M	95		100
22	pinyon	1	Y	5		100
23	bitterbrush	3	M	65		100
24	pinyon	4	M	25		(15) ok
25	pinyon	4	M	25		(10) ok

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RBOSP PROGRESS REPO

03C1.3.1 PF

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: [illegible] Sample Unit #: 24

T 1S R 99W S 15 1/4 1/4 S NW/SE Date: [illegible]

Aspect (degrees) [illegible] Slope (degrees) [illegible] Elevation (feet) 6850

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	[illegible]	4	M	5	[illegible]	65%
2	[illegible]	[illegible]	M	5		20%
3	[illegible]	[illegible]	M	5		15
4	[illegible]	4	D	5		25
5	[illegible]	1	M	5		100
6	[illegible]	4	M	5		20
7	[illegible]	1	M	5		100
8	[illegible]	[illegible]	M	5		5
9	[illegible]	1	M	5		100
10	[illegible]	[illegible]	M	5		25
11	[illegible]		M	[illegible]		20
12	[illegible]	[illegible]	M	5		35
13	[illegible]	[illegible]	D	5		35
14	[illegible]	[illegible]	M	25		10
15	[illegible]	[illegible]	M	5		20
16	[illegible]	[illegible]	M	[illegible]		[illegible]
17	[illegible]		M	5		10
18	[illegible]		M	[illegible]		30
19	[illegible]	5	M	[illegible]		1[illegible]
20	[illegible]	[illegible]	D	[illegible]		[illegible]
21	[illegible]	[illegible]	M	25		[illegible]
22	[illegible]	[illegible]	M	[illegible]		[illegible]
23	[illegible]	4	M	[illegible]		5
24	[illegible]	3	M	95		100
25	[illegible]	[illegible]	Y	[illegible]	Y	[illegible]

RBOSP PROGRESS REPORT

83C1.3.1 P1

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 25

T 1S R 99W S 21 1/4 1/4 S SW/NE Date: 4-[illegible]-76

Aspect (degrees) 10 Slope (degrees) 5 Elevation (feet) 7100

Field Analyst(s): [illegible] QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	sage	1	D	5	1-4	100
2	juniper	1	S	0		100
3	serviceberry	3	M	65		100
4	sage	2	M	50		100
5	sage	2	M	50		100
6	sage	1	D	5		100
7	serviceberry	3	M	95		100
8	sage	1	Y	5		100
9	sage	1	D	5		100
10	[illegible]	1	Y	5		100
11	serviceberry	2	M	75		100
12	sage	1	D	5		100
13	sage	2	M	50		100
14	juniper	4	M	5		15
15	[illegible]	4	M	5		15
16	juniper	4	M	5		15
17	pinyon	4	M	5		90
18	sage	2	M	50		100
19	juniper	4	M	5		20
20	serviceberry	2	D	50		100
21	juniper	4	M	5		90
22	sage	1	D	5		100
23	sage	1	D	5		100
24	juniper	1	Y	5		100
25	juniper	4	M	5		95

83C1.3.1 AP

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 26

T 1S R 99W S 21 1/4 1/4 S SW|SE Date: 4/21/76

Aspect (degrees) 80 Slope (degrees) 5 Elevation (feet) 7100

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	3	M	95	N/A	100 %
2	Sage	1	M	5		100
3	bitterbrush	3	M	95		100
4	bitterbrush	3	M	95		100
5	Sage	1	M	5		100
6	pinyon	4	M	5		20
7	pinyon	4	M	5		20
8	pinyon	4	M	5		25
9	juniper	4	M	5		15
10	juniper	4	O	5		5
11	Sage	1	M	5		100
12	bitterbrush	3	M	95		100
13	Sage	1	M	5		100
14	Sage	1	M	5		100
15	sage	1	M	5		100
16	Sage	1	M	5		100
17	Sage	1	M	5		100
18	Sage	1	M	5		100
19	pinyon	4	M	5		5
20	pinyon	4	M	5		85
21	pinyon	1	M	5		100
22	pinyon	1	S	5		100
23	pinyon	1	Y	5		100
24	pinyon	1	O	5		100
25	Sage	1	O	5		100

RBOSP PROGRESS REPORT

83C1.3.1 PF

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 27

T1S R99W S30 1/4 1/4 SSW|NE Date: 4/27/76

Aspect (degrees) 2[illegible] Slope (degrees) 12 Elevation (feet) 7500

Field Analyst(s): Turner QA Check: lum 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Serviceberry	2	M	75	N/A	100%.
2	Sage	1	M	5		100
3	Serviceberry	2	M	50		100
4	Snowberry	1	M	5		100
5	Serviceberry	2	M	75		100
6	Snowberry	1	M	5		100
7	Sage	1	M	5		100
8	Sage	1	M	5		100
9	Snowberry	1	M	5		100
10	Serviceberry	2	M	25		[illegible]
11	Snowberry	1	M	5		100
12	Sage	1	M	5		100
13	Snowberry	2	M	25		100
14	Serviceberry	2	M	50		100
15	Serviceberry	2	M	50		100
16	Sage	1	M	5		100
17	[illegible]	2	M	25		100
18	Snowberry	1	M	5		100
19	Sage	1	M	5		100
20	Sage	1	M	5		100
21	[illegible]	1	M	5		100
22	[illegible]	1	M	5		100
23	Snowbush	1	M	5		100
24	[illegible]	1	M			[illegible]
25	[illegible]		M			[illegible]

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RBOSP PROGRESS REPORT

83C1.3.1 AP

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 26

T 1S R 99W S 21 1/4 1/4 S SW|SE Date: 4/21/76

Aspect (degrees) 80 Slope (degrees) 5 Elevation (feet) 7100

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	3	M	95	N/A	100 90
2	sage	1	M	5		100
3	bitterbrush	3	M	95		20
4	bitterbrush	3	M	93		100
5	sage	1	M	5		100
6	pinyon	4	M	5		20
7	pinyon	4	M	5		20
8	pinyon	4	M	5		25
9	juniper	4	M	5		15
10	juniper	4	O	5		5
11	sage	1	M	5		100
12	bitterbrush	3	M	95		100
13	sage	1	M	5		100
14	sage	1	M	5		100
15	sage	1	M	5		100
16	sage	1	M	5		100
17	sage	1	M	5		100
18	sage	1	M	5		100
19	pinyon	4	M	5		5
20	pinyon	4	M	5		85
21	pinyon	1	M	5		100
22	pinyon	1	S	5		100
23	pinyon	1	Y	5		100
24	pinyon	1	O	5		100
25	sage	1	O	5		100

RBOSP PROGRESS REPORT

83C1.3.1 PF

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: MIXED BRUSH Sample Unit #: 27

T1S R99W S 30 1/4 1/4 SSW|NE Date: 4/27/76

Aspect (degrees) [illegible] Slope (degrees) 10 Elevation (feet) 7500

Field Analyst(s): Turner QA Check: lum 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	2	M	75	N/A	100%
2	sage	1	M	5		100
3	serviceberry	2	M	50		100
4	snowberry	1	M	5		100
5	serviceberry	2	M	75		100
6	snowberry	1	M	5		100
7	sage	1	M	5		100
8	sage	1	M	5		100
9	snowberry	1	M	5		100
10	serviceberry	2	M	25		[illegible]
11	snowberry	1	M	[illegible]		[illegible]
12	sage	1	M	5		100
13	snowberry	2	M	25		100
14	serviceberry	2	M	50		[illegible]
15	serviceberry	2	M	50		100
16	sage	1	M	5		100
17	[illegible]	2	M	25		[illegible]
18	snowberry	[illegible]	[illegible]	5		100
19	sage	1	M	5		100
20	sage	1	M	5		100
21	snowberry	1	M	5		[illegible]
22	snowberry	1	M	5		100
23	snowberry	[illegible]	[illegible]	[illegible]		[illegible]
24	snowberry	1	M	[illegible]		[illegible]
25	snowberry		[illegible]			[illegible]

RBOSP PROGRESS REPORT

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P3C1.3.1 PF

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: [illegible] Sample Unit #: 28

T 1S R 99W S 30 1/4 1/4 S SE/NW Date: 4/27/76

Aspect (degrees) 325 Slope (degrees) 10 Elevation (feet) 7500

Field Analyst(s): [illegible] QA Check: brm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	snowberry	1	M	5	N/A	100
2	serviceberry	2	M	25		100
3	snowberry C	1	M	5		100
4	mtn mah.	1	M	25		100
5	snowberry	1	M	5		100
6	[illegible]	1	M	5		100
7	[illegible]	1	M	5		100
8	snowberry C	1	M	5		100
9	serviceberry	3	M	50		85
10	snowberry C	1	M	5		100
11	serviceberry	4	M	25		90
12	mtn mah C	5	D	25		90
13	serviceberry	1	M	5		100
14	snowberry C	1	M	5		100
15	serviceberry	1	M	5		100
16	mtn mah C	4	M	25		95
17	[illegible]	1	M	5		100
18	serviceberry	1	M	5		100
19	serviceberry C	2	M	25		100
20	snowberry	1	M	5		100
21	mtn mah	1	M	5		100
22	horsebrush	1	M	5		100
23	mtn mah	1	M	5		100
24	snowberry	1	M	5		100
25						

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RBOSP PROGRESS REPORT

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: [illegible] Sample Unit #: 29

T 16 R 99W S 30 1/4 1/4 S NW/SW Date: 4/27/76

Aspect (degrees) 340 Slope (degrees) 10 Elevation (feet) 7400

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	2	M	75	NA	[illegible]
2	mtn mah?	3	M	95		100
3	serviceberry	1	M	25		100
4	snowberry	1	M	5		100
5	[illegible]	1	M	5		100
6	snowberry	1	M	5		100
7	serviceberry	1	M	25		100
8	mtn mah	1	M	25		100
9	[illegible]	3	M	75		100
10	mtn mah	2	M	20		100
11	mtn mah	1	M	25		100
12	serviceberry	3	M	95		100
13	serviceberry	2	M	50		100
14	pinyon	1	Y	5		100
15	mtn mah	1	Y	25		100
16	mtn mah	2	M	25		100
17	serviceberry	1	M	5		100
18	[illegible]		M	5		100
19	[illegible]		M	5		100
20	pinyon	1	Y	5		100
21	[illegible]					100
22	[illegible]	1	M			100
23	rabbitbrush	1	M	5		[illegible]
24	horsebrush	1	M	5		100
25	[illegible]	1	M	5		100

RBOSP PROGRESS REPORT

83c.1.3.1 PF

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 30

T 1S R 100W S 25 1/4 1/4 S NW/SE Date: 4/27/76

Aspect (degrees) 305 Slope (degrees) 8 Elevation (feet) 7400

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	mtn mah	1	M	5	N/A	100
2	mtn mah	2	M	25		100
3	serviceberry	1	M	5		100
4	[illegible]	1	M	5		100
5	[illegible]	2	M	25		100
6	serviceberry	3	M	75		100
7	mtn mah.	4	M	5		80
8	[illegible] Brush	1	M	5		100
9	sage	1	M	5		100
10	sage	1	M	5		100
11	serviceberry	1	M	5		100
12	[illegible]	1	M	5		100
13	serviceberry	1	M	5		100
14	[illegible]	1	M	5		100
15	Serviceberry	1	M	5		100
16	[illegible]	1	Y	5		100
17	[illegible]	2	M	25		100
18	[illegible]	1	M	5		100
19	sage	1	M	5		100
20	Serviceberry	2	M	25		100
21	Serviceberry	1	M	5		100
22	[illegible]	1	M			100
23	mtn mah	1	M	5		100
24	[illegible]	1	M			100
25	[illegible]	[illegible]	M	5		100

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RBOSP PROGRESS REPORT

83C 1.3.1 PF

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: [illegible] Sample Unit #: 31

T 1S R 100W S 25 1/4 1/4 S SW/SE Date: 4/21/76

Aspect (degrees) 50 Slope (degrees) 25 Elevation (feet) 7600

Field Analyst(s): [illegible] QA Check: brm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Serviceberry	1	M	5	N/A	100
2	serviceberry	1	M	5		100
3	sage	1	M	5		100
4	sage	1	m	5		100
5	snowberry	1	m	5		100
6	serviceberry	1	m	5		100
7	sage	1	m	5		100
8	sage	1	m	5		100
9	Sage	1	m	5		100
10	snowberry	1	m	5		100
11	serviceberry	1	m	5		100
12	sage	1	m	5		100
13	snowberry	1	m	5		100
14	sage	1	m	5		100
15	serviceberry	1	m	5		100
16	sage	1	m	5		100
17	sage	1	m	5		100
18	snowberry	1	m	5		100
19	serviceberry	1	m	[illegible]		100
✓ 20	mtn mah	1	m	5		100
21	[illegible]	2	m	50		100
✓ 22	mtn mah	1	m	5		100
23	[illegible]	1	m	5		100
24	[illegible]		m	[illegible]	Y	100
✓ 25	mtn mah	2	m	20		100

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RBOSP PROGRESS REPORT

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: [illegible] Sample Unit #: 32

T 1S R 100W S 36 1/4 1/4 S NE/NE Date: [illegible]

Aspect (degrees) 100 Slope (degrees) 10 Elevation (feet) 7500

Field Analyst(s): [illegible] QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	5	M	25	N/A	35
2	mtn mah	2	M	50		100
3	mtn mah	2	M	25		100
4	mtn mah	1	M	5		100
5	mtn mah	2	M	25		100
6	serviceberry	1	M	5		100
7	serviceberry	1	M	5		100
8	serviceberry	1	M	5		100
9	mtn mah	1	Y	5		100
10	mtn mah	1	M	5		100
11	serviceberry	1	M	5		100
12	serviceberry	1	M	5		100
13	serviceberry	2	M	50		100
14	serviceberry	2	M	50		100
15	mtn mah	[illegible]	M	25		100
16	mtn mah	2	M	25		100
17	serviceberry	1	M	5		100
18	snowberry	1	M	5		100
19	serviceberry	1	M	25		100
20	serviceberry	1	M	[illegible]		100
21	horsebrush	1	M	5		100
22	serviceberry	1	D	[illegible]		100
23	serviceberry	2	M	25		100
24	serviceberry	1	M	5		100
25	serviceberry	2	M	[illegible]		100

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83C1.3.1 PF

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: [illegible] Sample Unit #: 33

T 1S R 99W S 30 1/4 1/4 S SW/SW Date: 4/27/76

Aspect (degrees) [illegible] Slope (degrees) [illegible] Elevation (feet) 7500

Field Analyst(s): [illegible] QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	[illegible]	1	[illegible]	[illegible]	[illegible]	
2	[illegible]	[illegible]	M	[illegible]		
3	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
4	[illegible]	1	M	[illegible]		[illegible]
5	[illegible]	[illegible]	M	[illegible]		[illegible]
6	[illegible]	1	M	[illegible]		[illegible]
7	[illegible]	[illegible]	M	[illegible]		
8	[illegible]	1	M	[illegible]		[illegible]
9	[illegible]	[illegible]	M	[illegible]		[illegible]
10	[illegible]	[illegible]	M	[illegible]		[illegible]
11	[illegible]	1	M	[illegible]		[illegible]
12	[illegible]	[illegible]	M	[illegible]		[illegible]
13	[illegible]	[illegible]	M	[illegible]		[illegible]
14	[illegible]	1	M	5		[illegible]
15	[illegible]	[illegible]	M	[illegible]		[illegible]
16	[illegible]	[illegible]	M	[illegible]		[illegible]
17	[illegible]	[illegible]	M	[illegible]		[illegible]
18	[illegible]	1	M	5		[illegible]
19	[illegible]	[illegible]		[illegible]		[illegible]
20	[illegible]	1	M	[illegible]		[illegible]
21	[illegible]	[illegible]	[illegible]			
22	[illegible]	[illegible]	D	[illegible]		[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]		
24	[illegible]		[illegible]	[illegible]		[illegible]
25	[illegible]		[illegible]	[illegible]		[illegible]

83 01.3.1 PF

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mtn Brush Sample Unit #: 34
T 1S R 99W S 30 1/4 1/4 S NE/SW Date: 9/27/76
Aspect (degrees) 240 Slope (degrees) 15 Elevation (feet) 7400
Field Analyst(s): Turner QA Check: Tum 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	1	M	5	N/A	100
2	serviceberry	1	M	5		100
3	Snowberry	1	M	5		100
4	serviceberry	1	M	5		100
5	mtn mah	2	M	25		100
6	mtn mah	1	M	5		100
7	mtn mah	2	M	25		100
8	mtn mah	1	M	5		100
9	serviceberry	1	M	5		100
10	rabbitbrush	1	M	5		100
11	serviceberry	1	M	5		100
12	mtn mahog.	1	M	5		100
13	Serviceberry	1	M	5		100
14	mtn mah	2	M	50		100
15	serviceberry	1	M	5		100
16	mtn mah	2	M	75		100
17	serviceberry	1	M	5		100
18	snowberry	1	M	5		100
19	pinyon	1	M	5		100
20	Serviceberry	1	M	5		100
21	pinyon	1	M	5		100
22	serviceberry	1	M	5		100
23	serviceberry	1	M	5		100
24	mtn mah	1	M	25		100
25	pinyon	1	M	5		100

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PROGRESS REPOR

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 35

T 1S R 99W S 30 1/4 1/4 SNW/SE Date: 7/27/76

Aspect (degrees) 170 Slope (degrees) 10 Elevation (feet) 7400

Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	1	M	5	N/A	100
2	bitterbrush	2	M	50		100
3	serviceberry	1	M	5	|	100
4	serviceberry	1	D	5	|	100
5	snowberry	1	M	5	|	100
6	rabbitbrush	1	m	5	|	100
7	sagebrush	1	m	5	|	100
8	snowberry	1	m	5	|	100
9	serviceberry	1	m	5	|	100
10	rabbitbrush	1	m	5	|	100
11	sagebrush	1	m	5	|	100
12	snowberry	1	m	5	|	100
13	serviceberry	1	m	5	|	100
14	rabbitbrush	1	m	5	|	100
15	snowberry	1	m	5	|	100
16	rabbitbrush	1	m	25	|	100
17	sagebrush	1	m	5	|	100
18	rabbitbrush	1	m	5	|	100
19	snowberry	1	m	5	|	100
20	bitterbrush	2	M	50	|	100
21	serviceberry	1	M	5	|	100
22	snowberry	1	m	5	|	100
23	rabbitbrush	1	m	25	|	100
24	serviceberry	1	M	5	|	100
25	snowberry	1	m	5	|	100

RBOSP PROGRESS REP

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 36

T 1S R 99W S 32 1/4 1/4 S SW/NE Date: 1/27/76

Aspect (degrees) 30 Slope (degrees) 0 Elevation (feet) 7500

Field Analyst(s): [illegible] QA Check: Lum 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Serviceberry	1	M	5	N/A	100
2	snowberry	1	m	5		100
3	pinyon	1	m	5		100
4	sage	1	m	5		100
5	sage	1	m	5		100
6	snowberry	1	m	5		100
7	sage	1	m	5		100
8	serviceberry	1	D	5		100
9	Sage	1	M	5		100
10	serviceberry	4	m	5		95
11	Snowberry	1	m	5		100
12	Sage	1	m	5		100
13	pinyon	4	M	25		40
14	serviceberry	1	Y	5		100
15	sage	1	Y	5		100
16	sage	1	Y	5		100
17	sage	1	Y	5		100
18	sage	1	m	5		100
19	serviceberry	1	m	5		100
20	sage	1	M	5		100
21	Sage	1	m	5		100
22	serviceberry	2	Y	25		100
23	juniper	1	Y	1		100
24	Sage	1	M	5		100
25	pinyon	4	m	5		60

RBOSP PROGRESS REPORT

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 37

T 25 R 99W S 6 1/4 1/4 S NW/NE Date: 4/28/76

Aspect (degrees) 110 Slope (degrees) 5 Elevation (feet) 7500

Field Analyst(s): Turner QA Check: bcm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	sage	1	M	5	N/A	100 %
2	serviceberry	1	M	5		100
3	serviceberry	1	M	5		100
4	snowberry	1	M	5		100
5	sage	1	M	5		100
6	serviceberry	1	M	5		100
7	snowberry	1	M	5		100
8	snowberry	1	M	5		100
9	mtn mah	2	M	50		100
10	mtn mah	2	M	25		100
11	serviceberry	1	M	5		100
12	snowberry	1	M	5		100
13	mtn mah	3	Y	75		100
14	mtn mah	2	Y	50		100
15	snowberry	1	M	5		100
16	serviceberry	1	M	25		100
17	mtn mah	2	M	75		100
18	snowberry	1	M	5		100
19	rabbitbrush	1	M	5		100
20	bitterbrush	2	M	50		100
21	serviceberry	1	M	5		100
22	sage	1	Y	5		100
23	serviceberry	1	M	5		100
24	sage	1	M	5		100
25	rabbitbrush	1	M	5		100

RBOSP PROGRESS REPORT

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 38

T 1S R 99W S 31 1/4 1/4 S SE/SW Date: 4/28/76

Aspect (degrees) 5 Slope (degrees) 5 Elevation (feet) 7500

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	snowberry	1	m	5	N/A	100 %
2	serviceberry	1	m	5		100
3	snowberry	1	m	5		100
4	serviceberry	1	m	5		100
5	serviceberry	1	m	5		100
6	snowberry	1	m	5		100
7	sage	1	m	5		100
8	sage	1	m	5		100
9	sage	1	m	5		100
10	snowberry	1	m	5		100
11	sage	1	m	5		100
12	rabbitbrush	1	m	5		100
13	snowberry	1	m	5		100
14	serviceberry	1	m	5		100
15	snowberry	1	m	5		100
16	sage	1	m	5		100
17	serviceberry	1	m	5		100
18	snowberry	1	m	5		100
19	serviceberry	1	m	5		100
20	snowberry	1	m	5		100
21	serviceberry	1	m	5		100
22	sage	1	m	5		100
23	serviceberry	1	Y	5		100
24	snowberry	1	m	5		100
25	serviceberry	1	m	5		100

RBOSP PROGRESS REPORT

03[illegible]

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed brush Sample Unit #: [illegible]
T 1S R 99W S 31 1/4 1/4 S SW/SW Date: 4/28/76
Aspect (degrees) 355 Slope (degrees) 5 Elevation (feet) 7500
Field Analyst(s): [illegible] QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Serviceberry	1	M	5	N/A	100 %
2	Sage	1	M	5		100
3	Sage	1	M	5		100
4	Snowberry	1	M	5		100
5	Serviceberry	1	M	5		100
6	Sage	1	M	5		100
7	Serviceberry	1	M	5		100
8	Snowberry	1	M	5		100
9	Sage	1	M	5		100
10	Serviceberry	1	M	5		100
11	Sage	1	M	5		100
12	Sage	1	M	5		100
13	Sage	1	M	5		100
14	Snowberry	1	M	5		100
15	Serviceberry	1	M	5		100
16	Sage	1	M	5		100
17	Sage	1	M	5		100
18	Serviceberry	2	M	25		100
19	Snowberry	1	M	5		100
20	Sage	1	M	5		100
21	Serviceberry	1	M	5		100
22	Serviceberry	1	D	5		100
23	Serviceberry	1	M	25		100
24	Snowberry	1	M	5		100
25	Serviceberry	2	M	25		100

RBOSP PROGRESS [illegible]

83C1.3.1

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 40

T 2S R 100W S 1 1/4 1/4 S NE/NE Date: 4/23/76

Aspect (degrees) 170 Slope (degrees) 15 Elevation (feet) 7600

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbush	3	M	95	N/A	100 %
2	bitterbush	3	M	75		100
3	serviceberry	1	M	5		100
4	bitterbush	3	M	75		100
5	sage	1	M	5		100
6	bitterbush	2	M	50		100
7	sage	1	M	5		100
8	serviceberry	1	M	5		100
9	snowberry	1	M	5		100
10	bitterbush	3	M	75		100
11	bitterbush	2	M	50		100
12	bitterbush	3	M	95		100
13	bitterbush	2	M	50		100
14	serviceberry	2	M	50		100
15	bitterbush	2	M	50		100
16	bitterbush	3	M	75		100
17	bitterbush	3	M	75		100
18	bitterbush	1	M	25		100
19	Sage	1	M	5		100
20	serviceberry	1	M	5		100
21	serviceberry	1	M	5		100
22	Sage	1	M	5		100
23	bitterbush	2	M	50		100
24	bitterbush	2	M	50		100
25	Sage	1	M	5		100

RBOSP PROGRESS REPORT

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 41

T 2S R 100W S 1 1/4 1/4 S NE/NE Date: 4/28/76

Aspect (degrees) 180 Slope (degrees) 20 Elevation (feet) 7100

Field Analyst(s): Turner QA Check: lvm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	rabbitbrush	1	M	5	N/A	100 %
2	serviceberry	2	M	25		100
3	serviceberry	2	M	50	|	100
4	rabbitbrush	1	m	5	|	100
5	serviceberry	2	D	25	|	100
6	shadscale	1	M	0	|	100
7	serviceberry	2	m	25	|	100
8	serviceberry	1	M	5	|	100
9	serviceberry	1	D	5	|	100
10	Serviceberry	2	D	50	|	100
11	serviceberry	1	m	5	|	100
12	serviceberry	1	M	25	|	100
13	serviceberry	2	m	25	|	100
14	serviceberry	3	m	75	|	100
15	serviceberry	1	m	25	|	100
16	serviceberry	1	Y	5	|	100
17	rabbitbrush	1	M	5	|	100
18	Serviceberry	2	M	25	|	100
19	mtn. mah.	3	M	95	|	100
20	mtn mah	2	M	50	|	100
21	serviceberry	2	m	25	|	100
22	serviceberry	2	D	25	|	100
23	mtn mah	3	M	75	|	100
24	Serviceberry	2	D	50	|	100
25	mtn mah	2	M	75	|	100

RBOSP PROGRESS REPORT

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 42

T 2S R 99W S 6 1/4 1/4 S NW/SE Date: 4/28/76

Aspect (degrees) 15 Slope (degrees) 15 Elevation (feet) 7100

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	2	M	50	N/A	100%
2	snowberry	1	M	5		100
3	sage	1	M	5		100
4	serviceberry	2	M	50		100
5	snowberry	1	M	5		100
6	serviceberry	1	M	25		100
7	serviceberry	1	D	5		100
8	serviceberry	2	M	25		100
9	snowberry	1	M	5		100
10	serviceberry	2	M	25		100
11	snowberry	1	M	5		100
12	sage	1	M	5		100
13	snowberry	1	M	5		100
14	snowberry	2	D	25		100
15	sage	1	M	5		100
16	serviceberry	2	M	50		100
17	sage	1	M	5		100
18	snowberry	1	M	5		100
19	serviceberry	1	M	25		100
20	pinyon	1	M	25		100
21	sage	1	M	5		100
22	serviceberry	1	M	5		100
23	sage	1	M	5		100
24	serviceberry	1	M	25		100
25	serviceberry	2	M	25		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: [illegible]

T 2S R 99W S 6 1/4 1/4 S NW/SE Date: 4/28/76

Aspect (degrees) 120 Slope (degrees) 20 Elevation (feet) 7100

Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	snowberry	1	M	5	N/A	100%
2	serviceberry	1	M	25		100
3	snowberry	1	M	5		100
4	serviceberry	2	M	50		100
5	snowberry	1	M	5		100
6	serviceberry	1	M	25		100
7	pinyon	1	M	5		100
8	serviceberry	2	M	50		100
9	serviceberry	2	M	50		100
10	rabbitbrush	1	M	5		100
11	sage	1	M	5		100
12	serviceberry	3	M	75		100
13	sage	1	M	5		100
14	serviceberry	3	M	75		100
15	mtn mah.	2	M	75		100
16	serviceberry	3	M	75		100
17	serviceberry	3	M	75		100
18	rabbitbrush	1	M	5		100
19	mtn mah.	3	M	75		100
20	serviceberry	2	M	50		100
21	rabbitbrush	1	M	5		100
22	serviceberry	3	M	75		100
23	rabbitbrush	2	M	75		100
24	serviceberry	3	M	75		100
25	serviceberry	3	M	75		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 44

T 1S R 99W S 35 1/4 1/4 S NW/NE Date: 4/28/76

Aspect (degrees) 150 Slope (degrees) 8 Elevation (feet) 6700

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	pinyon	1	M	5	N/A	100 %
2	pinyon	2	D	25		100
3	sage	2	D	25		100
4	sage	2	M	25		100
5	juniper	4	M	5		15
6	sage	1	M	5		100
7	sage	1	M	5		100
8	sage	1	M	5		100
9	Sage	1	M	5		100
10	Sage	1	M	5		100
11	juniper	4	D	5		10
12	Sage	1	M	5		100
13	pinyon	5	M	25		15
14	[illegible]	1	M	5		100
15	juniper	4	D	5		15
16	juniper	4	M	5		35
17	pinyon	2	M	50		100
18	pinyon	1	M	25		100
19	juniper	4	D	5		70
20	juniper	4	M	5		20
21	pinyon	2	Y	25		100
22	juniper	4	M	5		20
23	pinyon	1	Y	5		100
24	pinyon	2	Y	50		100
25	juniper	4	M	5		15

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 45

T 1S R 99W S 34 1/4 1/4 S NE/SW Date: 4/28/76

Aspect (degrees) 70 Slope (degrees) 5 Elevation (feet) 6700

Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	3	M	95	N/A	100 %
2	serviceberry	3	M	98		100
3	pinyon	2	M	25		100
4	serviceberry	3	M	75		100
5	pinyon	1	Y	25		100
6	rabbitbrush	1	M	5		100
7	pinyon	2	M	50		100
8	serviceberry	3	M	75		100
9	serviceberry	3	M	95		100
10	rabbitbrush	1	M	5		100
11	serviceberry	2	M	50		100
12	sage	2	M	50		100
13	serviceberry	3	M	95		100
14	serviceberry	3	M	75		100
15	pinyon	4	M	25		15
16	rabbitbrush	1	D	5		100
17	sage	1	M	5		100
18	saltbush	2	M	50		100
19	sage	2	M	50		100
20	sage	1	M	25		100
21	saltbush	2	M	50		100
22	sage	2	M	50		100
23	sage	2	M	50		100
24	rabbitbrush	1	M	5		100
25	pinyon	4	M	25		15

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P - J Sample Unit #: 46

T 1S R 99W S 34 1/4 1/4 S NE/SW Date: 1/28/76

Aspect (degrees) 40 Slope (degrees) 15 Elevation (feet) 6800

Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	mtn mah	3	M	95	N/A	100 %
2	pinyon	2	Y	50		100
3	serviceberry	3	M	95		100
4	serviceberry	2	Y	75		100
5	pinyon	2	M	50		100
6	mtn mah	2	M	75		100
7	serviceberry	3	M	75		100
8	juniper	1	Y	5		100
9	juniper	4	D	5		15
10	serviceberry	3	M	55		100
11	juniper	1	Y	5		100
12	serviceberry	3	M	75		100
13	pinyon	2	Y	50		100
14	sage	1	Y	5		100
15	Serviceberry	3	D	75		100
16	pinyon	4	M	25		15
17	Serviceberry	3	M	95		100
18	Serviceberry	3	M	75		100
19	juniper	2	M	50		100
20	serviceberry	3	M	75		100
21	serviceberry	3	M	75		100
22	sage	1	M	5		100
23	Serviceberry	3	M	95		100
24	serviceberry	3	M	75		100
25	pinyon	1	Y	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P - J Sample Unit #: 47

T 2S R 99W S 4 1/4 1/4 S NE/NE Date: 4/28/76

Aspect (degrees) 350 Slope (degrees) 45 Elevation (feet) 7100

Field Analyst(s): Turner QA Check: bin 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	3	M	95	N/A	100%
2	rabbitbrush	1	M	5		100
3	bitterbrush	2	M	50		100
4	rabbitbrush	1	M	5		100
5	bitterbrush	2	M	75		100
6	sage	1	M	5		100
7	juniper	4	M	5		10
8	pinyon	1	Y	5		100
9	juniper	4	M	5		40
10	juniper	4	M	5		25
11	pinyon	4	M	25		10
12	pinyon	4	M	5		5
13	juniper	4	M	5		20
14	sage	1	M	5		100
15	juniper	4	M	5		20
16	[illegible]	4	M	5		25
17	pinyon	4	M	5		10
18	bitterbrush	1	M	50		100
19	sage	1	D	5		100
20	pinyon	1	Y	5		
21	juniper	4	M	5		25
22	sage	1	M	5		100
23	sage	1	D	5		100
24	pinyon	1	M	20		100
25	sage	1	M	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 43

T 2S R 99W S 4 1/4 1/4 SE/NE Date: 4/28/76

Aspect (degrees) 190 Slope (degrees) 10 Elevation (feet) 7100

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	[illegible]	1	M	5	n/a	100 %
2	bitterbrush	3	m	95		100
3	juniper	1-4	M	5		55
4	rabbitbrush	1	M	5		100
5	[illegible]	1	M	5		100
6	sage	1	m	5		100
7	Sage	1	O	5		100
8	juniper	4	M	5		45
9	pinyon	1	M	5		10
10	[illegible]	1	S	0		100
11	bitterbrush	3	M	95		100
12	bitterbrush	3	M	95		100
13	rabbitbrush	1	M	5		100
14	serviceberry	3	M	75		100
15	pinon	3	M	60		100
16	Sage	1	m	5		100
17	rabbitbrush	1	m	5		100
18	bitterbrush	3	O	95		100
19	bitterbrush	3	O	95		100
20	pinon	1	M	5		100
21	rabbitbrush	1	m	5		100
22	rabbitbrush	1	m	5		100
23	rabbitbrush	1	m	5		100
24	pinyon	4	m	5		90
25	pinyon	4	m	5		95

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 49

T 2S R 99W S 8 1/4 1/4 S SE/NW Date: 4/28/76

Aspect (degrees) 190 Slope (degrees) 15 Elevation (feet) 7400

Field Analyst(s): Turner QA Check: bw 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	3	M	95	N/A	100%
2	bitterbrush	3	M	95		100
3	bitterbrush	3	M	95		100
4	juniper	1	M	5		100
5	pinyon	1	Y	5		1
6	bitterbrush	3	Y	95		100
7	juniper	4	M	5		10
8	pinyon	..	D	0		0
9	juniper	4	M	5		100
10	bitterbrush	3	M	95		100
11	sage	1	M	5		100
12	bitterbrush	3	M	75		100
13	serviceberry	2	M	50		100
14	bitterbrush	3	M	75		100
15	pinyon	1	S	0		100
16	juniper	1	Y	0		100
17	juniper	2	M	50		100
18	sage	1	M	5		100
19	juniper	1	M	5		100
20	juniper	4	M	5		15
21	juniper	1	M	5		100
22	sage	1	M	5		100
23	sage	1	Y	5		100
24	juniper	1	Y	5		100
25	juniper	1	M	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 53

T 2S R 100W S 14 1/4 1/4 S NE/NW Date: 4/20/76

Aspect (degrees) 360 Slope (degrees) 5 Elevation (feet) 8150

Field Analyst(s): Turner QA Check: lww 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	snowberry	1	M	5	N/A	100%
2	serviceberry	1	D	5		100
3	snowberry	1	M	5		100
4	serviceberry	w	m	5		50
5	serviceberry	1	M	25		100
6	snowberry	1	m	5		100
7	sage	1	m	5		100
8	sage	1	m	5		100
9	snowberry	1	m	5		100
10	snowberry	1	m	5		100
11	serviceberry	w	m	5		80
12	sage	1	m	5		100
13	snowberry	1	m	5		100
14	sage	1	m	5		100
15	serviceberry	4	m	25		85
16	sage	1	m	5		100
17	serviceberry	4	m	5		90
18	sage	1	m	5		100
19	sage	1	m	5		100
20	serviceberry	1	m	25		100
21	snowberry	1	m	5		100
22	sage	1	m	5		100
23	snowberry	1	m	5		100
24	serviceberry	1	m	5		100
25	snowberry	1	m	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 51

T 25 R 100W S 14 1/4 1/4 SSW/NE Date: 4/28/76

Aspect (degrees) 190 Slope (degrees) 5 Elevation (feet) 8100

Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Sage	1	M	5	N/A	100%
2	Serviceberry	1-4	m	5		90
3	Snowberry	1	M	5		100
4	Sage	1	Y	0		100
5	Sage	1	Y	5		100
6	Snowberry	1	M	5		100
7	Sage	1	m	5		100
8	Serviceberry	4	D	5		90
9	Snowberry	1	M	5		100
10	Sage	1	m	5		100
11	Snowberry	1	m	5		100
12	Sage	1	m	5		100
13	Snowberry	1	m	5		100
14	Sage	1	m	5		100
15	Serviceberry	2	m	25		100
16	Snowberry	1	m	5		100
17	Sage	1	m	5		100
18	Snowberry	1	m	5		100
19	Sage	1	m	5		100
20	Snowberry	1	m	5		100
21	Sage	1	m	5		100
22	Sage	1	m	5		100
23	Sage	1	m	5		100
24	Serviceberry	1	m	5		100
25	Serviceberry	1	m	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 52
T 2S R 100W S 14 1/4 1/4 SW/NE Date: 4/28/76
Aspect (degrees) 10 Slope (degrees) 5 Elevation (feet) 800
Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Serviceberry	4	M	5	N/A	85 %
2	Snowberry 0	1	M	5		100
3	Sage 0	1	M	5		100
4	Sage	1	M	5		100
5	Snowberry	1	M	5		100
6	Serviceberry 0	1	M	5		100
7	Snowberry 0	1	M	5		100
8	Sage 0	1	M	5		100
9	[illegible]	1	M	5		100
10	Serviceberry	1	Y	5		100
11	Sage 0	1	M	5		100
12	Serviceberry	1	M	5		100
13	Snowberry 0	1	M	5		100
14	Sage 0	1	M	5		100
15	Sage	1	M	5		100
16	Serviceberry	1	M	5		100
17	Sage 0	1	M	5		100
18	Sage	1	M	3		100
19	Serviceberry	1	M	5		100
20	Sage 0	1	M	5		100
21	Serviceberry	1	M	5		100
22	Sage 0	1	M	5		100
23	Serviceberry	1	M	5		100
24	Snowberry 0	1	M	5		100
25	Sage 0	1	M	5		100

RBOSP PROGRESS REPORT

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 57
T 2S R 109W S 14 1/4 1/4 S SE|NE Date: 4/22/76
Aspect (degrees) 100 Slope (degrees) 5 Elevation (feet) 8100
Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Snowberry	1	M	5	N/A	100%
2	Serviceberry	4	M	5		80
3	Snowberry 0	1	M	5		100
4	Sage 0	1	M	5		100
5	Snowberry	1	M	5		100
6	Serviceberry	4	M	5		90
7	Sage 0	1	M	5		100
8	Serviceberry	1	Y	5		100
9	Serviceberry 0	4	M	5		80
10	Serviceberry	1	M	5		100
11	Snowberry 0	1	M	5		100
12	Sage 0	1	M	5		100
13	Snowberry	1	M	5		100
14	Serviceberry	4	M	5		90
15	Snowberry 0	1	M	5		100
16	Serviceberry	1	M	5		100
17	Sage 0	1	M	5		100
18	Snowberry	1	M	5		100
19	Serviceberry 0	1	M	5		100
20	Serviceberry 0	4	M	5		75
21	Serviceberry 0	4	M	5		75
22	Snowberry 0	1	M	5		100
23	Serviceberry	4	M	5		90
24	Sage 0	1	M	5		100
25	Snowberry 0	1	M	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 51

T 2S R 99W S 14 1/4 1/4 S NE/NE Date: 4/23/76

Aspect (degrees) 40 Slope (degrees) 5 Elevation (feet) 8100

Field Analyst(s): [illegible] QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	1	M	S	N/A	100%
2	sage 0	1	M	S	|	100
3	serviceberry	2	M	S	|	90
4	[illegible] snowberry	1	M	S	|	100
5	snowberry 0	1	M	S	|	100
6	serviceberry	1	M	S	|	100
7	sage	1	M	S	|	100
8	serviceberry	1	M	S	|	100
9	sage 0	1	M	S	|	100
10	sage	1	M	S	|	100
11	sage	1	M	S	|	100
12	serviceberry	2	M	S	|	80
13	snowberry 0	1	M	S	|	100
14	sage 0	1	M	S	|	100
15	sage	1	M	S	|	100
16	serviceberry	1	M	S	|	100
17	snowberry 0	1	M	S	|	100
18	snowberry	2	M	S	|	90
19	[illegible] 0	1	M	S	|	100
20	[illegible] 0	1	M	S	|	100
21	[illegible] 0	1	M	S	|	100
22	[illegible] 0	1	M	S	|	100
23	serviceberry	1	M	S	|	100
24	sage 0	1	M	S	|	100
25	[illegible]	1	M	S		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 55
T 2S R 100W S 13 1/4 1/4 S NW/NW Date: 4/28/76
Aspect (degrees) 30 Slope (degrees) 0 Elevation (feet) 7900
Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	1	D	5	N/A	100 %
2	snowberry	1	M	5		100
3	sage	1	m	5		100
4	sage	1	m	5		100
5	serviceberry	1	m	5		100
6	sage	1	m	5		100
7	serviceberry	1	m	5		100
8	snowberry	1	m	5		100
9	sage	1	m	5		100
10	sage	1	m	5		100
11	serviceberry	1	m	5		100
12	sage	1	m	5		100
13	sage	1	m	5		100
14	snowberry	1	m	5		100
15	serviceberry	4	m	5		90
16	snowberry	1	m	5		100
17	sage	1	m	5		100
18	serviceberry	1	m	5		100
19	bitterbrush	2	M	50		100
20	snowberry	1	m	5		100
21	sage	1	m	5		100
22	serviceberry	1	m	5		100
23	snowberry	1	m	5		100
24	serviceberry	1	m	5		100
25	sage	1	m	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 56

T 2S R 100W S 13 1/4 1/4 S NE|NE Date: 4/23/76

Aspect (degrees) 100 Slope (degrees) 10 Elevation (feet) 7800

Field Analyst(s): Turner QA Check: bew 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	2	m	50	N/A	100 %
2	sage	1	m	5		100
3	snowberry	1	m	5		100
4	bitterbrush	2	m	50		100
5	snowberry	1	m	5		100
6	serviceberry	4	M	5		90
7	sage	1	m	5		100
8	snowberry	1	m	5		100
9	oak	4	m	5		50
10	serviceberry	4	m	5		95
11	snowberry	1	m	5		100
12	sage	1	m	5		100
13	snowberry	1	m	5		100
14	serviceberry	1	m	5		100
15	snowberry	1	m	5		100
16	sage	1	O	5		100
17	bitterbrush	2	M	50		100
18	sage	1	m	5		100
19	bitterbrush	1	m	25		100
20	sage	1	m	5		100
21	sage	1	m	5		100
22	bitterbrush	1	m	25		100
23	oak	1	m	5		100
24	sage	1	m	5		100
25	snowberry	1	m	5		100

RBOSP PROGRESS REPORT

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 57

T 2S R 99W S 5 1/4 1/4 S SE/SE Date: 4/22/76

Aspect (degrees) 50 Slope (degrees) 10 Elevation (feet) 7200

Field Analyst(s): [illegible] QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Bitterbrush	3	M	78	N/A	100%
2	Bitterbrush	2	M	50		100
3	sage	1	M	5		100
4	serviceberry	2	M	50		100
5	pinyon	1	Y	0		100
6	serviceberry	2	M	75		100
7	Sage	1	M	5		100
8	sage	1	M	5		100
9	Snowberry	1	M	5		100
10	Serviceberry	2	M	50		100
11	Serviceberry	2	D	50		100
12	Serviceberry	2	M	50		100
13	mtn mah	3	M	75		100
14	mtn mah	3	M	75		100
15	mtn mah	3	M	75		100
16	Serviceberry	2	M	50		100
17	Snowberry	1	M	5		100
18	Serviceberry	2	M	50		100
19	Serviceberry	3	M	75		100
20	mtn mah	3	M	95		100
21	mtn mah	3	M	75		100
22	mtn mah	3	M	95		100
23	pinyon	1	Y	0		100
24	mtn mah	5	M	50		80
25	Sage	1	D	5		100

RBOSP PROGRESS REP

03 C1.3.1

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P - J Sample Unit #: 58

T 2S R 99W S 3 1/4 1/4 S NE/NE Date: 4/23/76

Aspect (degrees) 230 Slope (degrees) 5 Elevation (feet) 6800

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	pinyon	1	Y	5	N/A	100%
2	Serviceberry	2	M	50		100
3	serviceberry	2	m	75		100
4	pinyon	1	M	5		100
5	juniper	4	m	5		.25
6	juniper	4	M	5		5
7	sage	1	Y	5		100
8	juniper	4	m	5		90
9	serviceberry	2	m	75		100
10	pinyon	1	m	25		100
11	serviceberry	2	m	75		100
12	sage	1	m	5		100
13	Serviceberry	2	M	50		100
14	pinyon	1	Y	5		100
15	sage	1	Y	5		100
16	rabbitbrush	1	D	5		100
17	rabbitbrush	1	D	5		100
18	Sage	1	M	5		100
19	juniper	1	m	5		100
20	Sage	1	m	5		100
21	Sage	1	D	5		100
22	serviceberry	3	m	75		100
23	rabbitbrush	1	m	5		100
24	Sage	1	D	5		100
25	Sage	1	M	5		100

RBOSP PROGRESS REPORT

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P – J Sample Unit #: 59

T 2S R 99W S 2 1/4 1/4 S NW/NW Date: 4/28/76

Aspect (degrees) 50 Slope (degrees) 5 Elevation (feet) 6300

Field Analyst(s): Tierney QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	3	D	75	N/A	100%
2	serviceberry	2	Y	50		100
3	pinyon	4	M	25		45
4	serviceberry	3	M	95		10
5	juniper	4	M	5		90
6	serviceberry	3	M	95		100
7	pinyon	4	M	25		70
8	pinyon	4	M	5		75
9	serviceberry	3	M	75		100
10	pinyon	4	M	50		90
11	bitterbrush	3	M	75		100
12	sage	1	M	5		100
13	~~bitter~~ serviceberry	3	M	95		100
14	serviceberry	2	D	50		100
15	serviceberry	2	M	75		100
16	pinyon	1	M	5		100
17	serviceberry	3	M	75		100
18	sage	1	D	5		100
19	sage	1	M	5		100
20	pinyon	4	M	25		10
21	sage	1	D	5		100
22	serviceberry	2	M	75		100
23	pinyon	4	M	5		90
24	pinyon	1	Y	5		100
25	pinyon	1	Y	5		100

RBOSP PROGRESS REPORT

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 60

T 2S R. 99W S 10 1/4 1/4 S NE/NE Date: 4/23/76

Aspect (degrees) 110 Slope (degrees) <5 Elevation (feet) 7050

Field Analyst(s): Turner QA Check:

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	mtn mah	2	M	50	N/A	100%
2	mtn mah	2	M	50		100
3	mtn mah	2	M	50		100
4	Sage	1	M	5		100
5	mtn mah	2	M	75		100
6	juniper	1	M	5		100
7	sage	1	M	5		100
8	sage	1	Y	5		100
9	juniper	1	Y	5		100
10	bitterbrush	3	M	75		100
11	pinyon	1	M	5		100
12	juniper	4	D	5		10
13	bitterbrush	2	M	50		100
14	pinyon	4	M	5		10
15	juniper	4	M	0		25
16	pinyon	4	M	5		5
17	pinyon	4	M	5		5
18	pinyon	4	M	5		5
19	juniper	4	M	5		5
20	pinyon	4	M	5		5
21	bitter brush	2	M	50		100
22	bitterbrush	1	M	25		100
23	juniper	4	M	5		25
24	juniper	4	M	5		25
25	bitterbrush	2	M	75		100

RBOSP PROGRESS REPORT

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P - J Sample Unit #: 1-1

T 25 R 99W S 10 1/4 1/4 S NE/NW Date: 4/28/76

Aspect (degrees) 30 Slope (degrees) 45 Elevation (feet) 7050

Field Analyst(s): Turner QA Check: [illegible] 5-4-76.

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Sage	1	D	5	P/A	100%
2	Pinyon	1	S	0		100
3	bitterbrush	3	M	75		100
4	bitterbrush	2	D	50		100
5	sage	1	D	5		100
6	juniper	4	M	5		45
7	pinyon	4	m	5		5
8	juniper	7	D	0		0
9	pinyon	4	m	5		5
10	juniper	4	M	5		5
11	bitterbrush	3	m	75		100
12	serviceberry	3	m	75		100
13	juniper	4	M	5		5
14	Sage	1	D	5		100
15	pinyon	1	Y	5		100
16	bitterbrush	2	D	50		100
17	Sage	1	m	5		100
18	Sage	1	D	5		100
19	Sage	1	D	5		100
20	Sage	1	m	5		100
21	Sage	1	m	5		100
22	Pinyon	4	m	5		10
23	Sage	1	D	5		100
24	Sage	1	m	5		100
25	Sage	1	D	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 62

T 2S R 99W S 8 1/4 1/4 S SW/SE Date: 4/28/76

Aspect (degrees) 210 Slope (degrees) 20 Elevation (feet) 7200

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Serviceberry	2	M	50	N/A	100%
2	rabbitbrush	1	M	5		100
3	Serviceberry	2	m	50		100
4	sage	1	M	5		100
5	sage	1	m	5		100
6	pinyon	4	M	5		100
7	Sage	1	D	5		100
8	juniper	1	M	5		100
9	Serviceberry	2	M	50		100
10	Sage	1	m	5		100
11	sage	1	m	5		100
12	sage	1	Y	5		100
13	sage	1	D	5		100
14	pinyon	4	m	5		10
15	Serviceberry	2	m	50		100
16	Sage	1	m	5		100
17	juniper	4	D	5		80
18	sage	1	M	5		100
19	sage	1	m	5		100
20	pinyon	4	m	5		25
21	Sage	1	M	5		100
22	rabbitbrush	1	m	5		100
23	Pinyon	4	m	5		70
24	rabbitbrush	1	m	5		100
25	pinyon	1	m	25		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 63

T 2S R 99W S 9 1/4 1/4 S NE/SW Date: 4/28/76

Aspect (degrees) 315 Slope (degrees) 45 Elevation (feet) 7200

Field Analyst(s): Turner QA Check: hm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Serviceberry	2	D	50	N/A	100%
2	pinyon	1	Y	0		100
3	serviceberry	1	M	25		100
4	Serviceberry	1	m	25		100
5	Sage	1	m	5		100
6	pinyon	1	S	0		100
7	juniper	1	Y	5		100
8	Sage	1	O	5		100
9	juniper	4	M	5		30
10	pinyon	4	m	5		20
11	Sage	1	Y	5		100
12	Sage	1	Y	5		100
13	pinyon	4	m	5		15
14	pinyon	1	m	5		100
15	juniper	4	m	5		60
16	pinyon	4	m	5		15
17	pinyon	4	m	5		15
18	pinyon	1	M	5		100
19	Sage	1	m	5		100
20	serviceberry	2	m	50		100
21	Sage	1	m	5		100
22	serviceberry	1	Y	25		100
23	sage	1	m	5		100
24	Sage	1	m	5		100
25	Sage	1	m	5		100

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83C 1.3.1

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 64

T 2S R 100W S 26 1/4 1/4 S NE/SW Date: 4/29/76

Aspect (degrees) 330 Slope (degrees) 10 Elevation (feet) 8350

Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	sage	1	M	5	N/A	100 %
2	sage	1	D	5		100
3	serviceberry	1	M	5		100
4	sage	1	M	5		100
5	sage	1	M	5		100
6	serviceberry	2	M	25		100
7	snowberry	1	M	5		100
8	serviceberry	1	M	5		100
9	sage	1	M	5		100
10	serviceberry	2	M	50		100
11	serviceberry	2	M	25		100
12	snowberry	1	M	5		100
13	serviceberry	1	M	5		100
14	snowberry	1	M	5		100
15	serviceberry	1	M	5		100
16	serviceberry	1	M	5		100
17	serviceberry	1	M	5		100
18	serviceberry	1	M	5		100
19	serviceberry	1	M	5		100
20	snowberry	1	M	5		100
21	sage	1	M	5		100
22	snowberry	1	M	5		100
23	sage	1	M	5		100
24	serviceberry	2	M	25		100
25	snowberry	1	M	5		100

RBOSP PROGRESS REPORT

83C 1.3.1

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 65

T 2S R 100W S 26 1/4 1/4 S NW/SE Date: 4/29/76

Aspect (degrees) 150 Slope (degrees) 15 Elevation (feet) 0350

Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Snowberry	1	m	5	n/A	100%
2	Sage	1	m	5		100
3	Snowberry	1	m	5		100
4	Serviceberry	4	m	5		80
5	Snowberry	1	m	5		100
6	Snowberry	1	m	5		100
7	Sage	1	m	5		100
8	Serviceberry	1	m	5		100
9	Sage	1	m	5		100
10	Snowberry	1	m	5		100
11	Sage	1	m	5		100
12	Snowberry	1	m	5		100
13	Sage	1	m	5		100
14	Snowberry	1	m	5		100
15	Serviceberry	4	m	5		90
16	Snowberry	1	m	5		100
17	Serviceberry	1	m	5		100
18	Serviceberry	1	m	25		100
19	Sage	1	m	5		100
20	Serviceberry	1	m	5		100
21	Snowberry	1	m	5		100
22	Serviceberry	1	m	5		100
23	Sage	1	m	5		100
24	Serviceberry	1	m	5		100
25	Sage	1	m	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: MIXED Brush Sample Unit #: 68

T 2S R 100W S 25 1/4 1/4 S SE/NW Date: 4/29/76

Aspect (degrees) 140 Slope (degrees) 10 Elevation (feet) 8100

Field Analyst(s): Turner QA Check: bem 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	2	M	25	N/A	100%
2	snowberry	1	m	5		100
3	snowberry	1	m	5		100
4	Serviceberry	1	m	5		100
5	oak	4	m	5		70
6	pinyon	1	m	5		100
7	Sage	1	m	5		100
8	snowberry	1	m	5		100
9	oak	4	m	5		60
10	Snowberry	1	m	5		100
11	oak	1	D	5		100
12	bitterbrush	1	m	5		100
13	Sage	1	m	5		100
14	sage	1	m	5		100
15	bitterbrush	2	m	25		100
16	Sage	1	m	5		100
17	Sage	1	m	5		100
18	Sage	1	m	5		100
19	bitterbrush	1	m	5		100
20	Snowberry	1	m	5		100
21	Sage	1	m	5		100
22	Snowberry	1	m	5		100
23	Sage	1	m	5		100
24	snowberry	1	m	5		100
25	serviceberry	1	m	25		100

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 6-1

T 2S R 100W S 25 1/4 1/4 S NW/NW Date: 4/29/76

Aspect (degrees) 330 Slope (degrees) 5 Elevation (feet) 8100

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	sage	1	m	5	N/A	100%
2	serviceberry	1	m	5		100
3	snowberry	1	m	5		100
4	sage	1	m	5		100
5	serviceberry	1	m	5		100
6	sage	1	m	5		100
7	snowberry	1	m	5		100
8	serviceberry	1	m	5		100
9	snowberry	1	m	5		100
10	sage	1	m	5		100
11	snowberry	1	m	5		100
12	sage	1	m	5		100
13	serviceberry	1	m	5		100
14	sage	1	m	5		100
15	serviceberry	1	m	5		100
16	sage	1	m	5		100
17	sage	1	m	5		100
18	serviceberry	1	m	5		100
19	sage	1	m	5		100
20	serviceberry	1	m	5		100
21	sage	1	m	5		100
22	serviceberry	4	m	5		40
23	snowberry	1	m	5		100
24	bitterbrush	2	m	50		100
25	snowberry	1	m	5		100

RBOSP PROGRESS REPO

83C1.3.1

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 72
T 2S R100W S 24 1/4 1/4 SNE|SE Date: 4/25/75
Aspect (degrees) 170 Slope (degrees) <5 Elevation (feet) 7300
Field Analyst(s): Turner QA Check: mw 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	1	M	5	N/A	100%
2	pinyon	1	M	5		100
3	sage	1	Y	5		100
4	sage	1	M	5		100
5	sage	1	S	0		100%
6	sage	1	M	5		100
7	sage	1	M	5		100
8	serviceberry	1	M	5		100
9	snowberry	1	M	5		100
10	sage	1	M	5		100
11	snowberry	1	M	5		100
12	serviceberry	1	M	5		100
13	serviceberry	1	M	25		100
14	sage	1	M	5		100
15	sage	1	M	5		100
16	serviceberry	1	D	5		100
17	sage	1	M	5		100
18	serviceberry	1	M	5		100
19	sage	1	M	5		100
20	sage	1	Y	5		100
21	serviceberry	1	M	5		100
22	serviceberry	1	M	5		100
23	serviceberry	4	D	5		90
24	sage	1	M	5		100
25	sage	1	M	5		100

RBOSP PROGRESS REPORT

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83C1.3.

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 73

T 2S R 99W S 19 1/4 1/4 S SW|SW Date: 4/30/76

Aspect (degrees) 270 Slope (degrees) 10 Elevation (feet) 7800

Field Analyst(s): Turner QA Check: Turner 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	snowberry	1	m	5	N/A	100 %
2	serviceberry	1	D	5		100
3	sage	1	m	5		100
4	sage	1	m	5		100
5	snowberry	1	m	5		100
6	sage	1	m	5		100
7	sage	1	m	5		100
8	snowberry	1	m	5		100
9	serviceberry	4	A	5		95
10	serviceberry	2	D	25		100
11	snowberry	1	m	5		100
12	serviceberry	1	m	5		100
13	snowberry	1	D	5		100
14	sage	1	m	5		100
15	sage	1	m	5		100
16	snowberry	1	m	5		100
17	serviceb.	1	m	5		100
18	serviceberry	1	m	5		100
19	sage	1	m	5		100
20	snowberry	1	m	5		100
21	serviceberry	1	m	5		100
22	snowberry	1	m	5		100
23	serviceberry	4	m	5		85
24	sage	1	m	5		100
25	sage	1	m	5		100

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RBOSP PROGRESS REPORT

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 74

T 2S R 99W S 2 1/4 1/4 S SE|SE Date: 4/23/76

Aspect (degrees) 310 Slope (degrees) 5 Elevation (feet) 6950

Field Analyst(s): Turner QA Check: hm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	2	M	50	N/A	100%
2	bitterbrush	3	m	75		100
3	bitterbrush	3	m	75		100
4	bitterbrush	2	m	75		100
5	juniper	1	m	5		100
6	bitterbrush	1	m	20		100
7	Sage	1	m	5		100
8	bitterbrush	3	m	95		100
9	bitterbrush	3	m	75		100
10	bitterbrush	2	m	75		100
11	bitterbrush	3	m	95		100
12	bitterbrush	2	m	50		100
13	pinyon	1	m	25		100
14	bitterbrush	3	D	95		100
15	juniper	4	m	5		35
16	Sage	1	m	5		100
17	juniper	1	m	5		100
18	juniper	5	m	25		45
19	Sage	1	m	5		100
20	Sage	1	m	5		100
21	pinyon	4	m	25		20
22	Sage	1	m	5		100
23	bitterbrush	3	m	95		100
24	juniper	1	m	5		100
25	serviceberry	3	m	75		100

RBOSP PROGRESS REPORT

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 75

T 2S R 99W S 1 1/4 1/4 S SW/SW Date: 4/29/76

Aspect (degrees) 110 Slope (degrees) 5 Elevation (feet) 6950

Field Analyst(s): Turner QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	3	M	95	N/A	100%
2	bitterbrush	3	m	95		100
3	bitterbrush	3	m	95		100
4	Sage	1	m	5		100
5	Sage	1	m	5		100
6	bitterbrush	2	m	50		100
7	bitterbrush	3	M	95		100
8	bitterbrush	2	m	50		100
9	bitterbrush	3	M	75		100
10	pinyon	4	m	25		40
11	juniper	4	m	5		10
12	juniper	4	m	5		5
13	Sage	1	m	5		100
14	bitterbrush	2	m	50		100
15	bitterbrush	3	m	95		100
16	bitterbrush	2	m	50		100
17	juniper	7	m	0		~~100~~ 0
18	bitterbrush	3	m	95		100
19	bitterbrush	2	m	75		100
20	bitterbrush	3	m	75		100
21	pinyon	1	Y	5		100
22	bitterbrush	2	m	75		100
23	bitterbrush	3	m	75		100
24	pinyon	1	Y	5		100
25	bitterbrush	2	m	50		100

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 76
T 2S R 98W S 8 1/4 1/4 S NW|SE Date: 4/29/76
Aspect (degrees) 350 Slope (degrees) 5 Elevation (feet) 6800
Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	3	M	98	N/A	100%
2	bitterbrush	2	M	75		100
3	pinyon	1	Y	0		100
4	rabbitbrush	1	M	5		100
5	bitterbrush	3	M	78		100
6	bitterbrush	3	M	95		100
7	bitterbrush	3	M	95		100
8	pinyon	1	M	5		100
9	pinyon	1	M	5		100
10	pinyon	1	Y	0		100
11	juniper	1	Y	5		00
12	pinyon	1	D	0		100
13	juniper	1	Y	0		100
14	pinyon	4	M	5		15
15	juniper	1	M	5		100
16	juniper	1	M	5		100
17	bitterbrush	2	M	75		100
18	sage	2	Y	50		100
19	pinyon	4	D	5		15
20	juniper	4	M	5		15
21	sage	1	D	5		100
22	pinyon	4	M	5		20
23	pinyon	1	Y	0		100
24	pinyon	4	M	5		10
25	juniper	1	S	0		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 77

T 2S R 93W S 8 1/4 1/4 S NW|SE Date: 4/21/76

Aspect (degrees) 200 Slope (degrees) 7 Elevation (feet) 6300

Field Analyst(s): Turner QA Check: lmw 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	3	M	75	N/A	100 90
2	bitterbrush	3	M	95		100
3	bitterbrush	3	M	95		100
4	pinyon	1	Y	0		100
5	bitterbrush	3	M	75		100
6	bitterbrush	3	M	95		100
7	juniper	4	M	5		10
8	pinyon	1	Y	5		100
9	bitterbrush	3	D	95		100
10	bitterbrush	3	D	95		100
11	bitterbrush	3	M	95		100
12	bitterbrush	3	M	95		100
13	pinyon	1	Y	0		100
14	bitterbrush	3	M	75		100
15	rabbitbrush	1	M	5		100
16	bitterbrush	3	M	95		100
17	bitterbrush	3	M	95		100
18	pinyon	1	M	5		100
19	juniper	1	M	5		100
20	juniper	1	M	5		100
21	bitterbrush	3	D	75		100
22	pinyon	1	M	5		100
23	pinyon	1	Y	5		100
24	bitterbrush	3	M	95		100
25	pinyon	1	Y	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 7B

T 2S R 93W S 13 1/4 1/4 S NE/NE Date: 4/29/76

Aspect (degrees) 170 Slope (degrees) 10 Elevation (feet) 6900

Field Analyst(s): Turner QA Check: bw 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	2	m	75	N/A	100%
2	rabbitbrush	1	m	5		100
3	rabbitbrush	1	m	5		100
4	pinyon	1	m	5		100
5	pinyon	1	Y	0		100
6	rabbitbrush	1	M	5		100
7	rabbitbrush	1	m	5		100
8	juniper	4	m	5		35
9	bitterbrush	3	m	95		100
10	pinyon	1	Y	5		100
11	bitterbrush	2	m	75		100
12	bitterbrush	2	m	75		100.
13	juniper	4	m	5		15
14	bitterbrush	3	m	75		100
15	pinyon	1	m	5		100
16	bitterbrush	2	m	75		100
17	rabbitbrush	1	m	5		100
18	pinyon	1	m	5		100
19	pinyon	1	m	5		100
20	bitterbrush	3	m	95		100
21	bitterbrush	2	m	75		100
22	pinyon	1	m	5		100
23	pinyon	4	m	5		50
24	bitterbrush	2	m	75		100
25	pinyon	4	m	5		90

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 79

T 2S R 98W S 7 1/4 1/4 S SE/SE Date: 4/29/76

Aspect (degrees) 340 Slope (degrees) 5 Elevation (feet) 6900

Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	3	M	75	N/A	100%
2	bitterbrush	3	m	95		100
3	sage	1	m	5		100
4	sage	1	m	5		100
5	bitterbrush	3	m	95		100
6	bitterbrush	3	m	95		100
7	sage	1	m	5		100
8	bitterbrush	3	m	75		100
9	bitterbrush	3	m	75		100
10	sage	2	m	50		100
11	pinyon	1	S	0		100
12	bitterbrush	2	m	75		100
13	sage	1	m	5		100
14	bitterbrush	2	m	50		100
15	bitterbrush	2	m	75		100
16	juniper	4	M	5		30
17	bitterbrush	2	m	75		100
18	bitterbrush	3	m	95		100
19	bitterbrush	2	m	50		100
20	bitterbrush	2	m	50		100
21	bitterbrush	3	m	75		100
22	bitterbrush	3	m	75		100
23	bitterbrush	3	m	95		100
24	Pinyon	1	Y	5		100
25	bitterbrush	3	m	95		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 30

T 2S R 99W S 13 1/4 1/4 S SE/SE Date: 4/29/76

Aspect (degrees) 340 Slope (degrees) 5 Elevation (feet) 7000

Field Analyst(s): Turner QA Check: hm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1.	bitterbrush	2	M	50	N/A	100%
2	rabbitbrush	1	M	5		100
3	pinyon	1	M	5		100
4	bitterbrush	2	M	75		100
5	bitterbrush	2	M	50		100
6	sage	1	O	5		100
7	juniper	1	M	5		100
8	serviceberry	1	Y	5		100
9	pinyon	1	M	5		100
10	juniper	1	M	5		100
11	pinyon	4	M	25		90
12	bitterbrush	2	M	50		100
13	sage	1	O	5		100
14	pinyon	1	Y	5		100
15	bitterbrush	2	M	75		100
16	pinyon	1	M	5		100
17	sage	1	M	5		100
18	sage	1	M	5		100
19	sage	1	Y	5		100
20	pinyon	4	M	5		5
21	sage	1	Y	5		100
22	sage	1	M	5		100
23	pinyon	4	M	5		65
24	juniper	4	M	5		80
25	juniper	1	Y	0		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 81

T 2S R 99W S 24 1/4 1/4 SNE|NE Date: 4/29/76

Aspect (degrees) 130 Slope (degrees) 12 Elevation (feet) 7000

Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	2	M	75	N/A	100%
2	bitterbrush	2	M	75	|	100
3	bitterbrush	3	M	95	|	100
4	juniper	4	M	5	|	20
5	bitterbrush	2	M	50	|	100
6	bitterbrush	2	M	50	|	100
7	bitterbrush	2	M	50	|	100
8	bitterbrush	3	M	75	|	100
9	rabbitbrush	1	M	5	|	100
10	bitterbrush	2	M	75	|	100
11	bitterbrush	3	M	95	|	100
12	bitterbrush	2	M	50	|	100
13	rabbitbrush	1	M	5	|	100
14	bitterbrush	2	M	50	|	100
15	bitterbrush	3	M	95	|	100
16	rabbitbrush	1	M	5	|	100
17	bitterbrush	2	M	75	|	100
18	bitterbrush	3	M	95	|	100
19	bitterbrush	3	M	75	|	100
20	juniper	4	M	5	|	15
21	bitterbrush	3	M	75	|	100
22	bitterbrush	2	M	50	|	100
23	bitterbrush	2	M	50	|	100
24	bitterbrush	3	M	75		100
25	juniper	4	M	5		20

RIIOSP PROGRESS I

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: 32
T 2S R 99W S 14 1/4 1/4 SSE/SE Date: 4/29/76
Aspect (degrees) 90 Slope (degrees) 25 Elevation (feet) 7000
Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	1	M	5	N/A	100%
2	pinyon	1	M	5		100
3	pinyon	1	Y	5		100
4	bitterbrush	2	M	50		100
5	bitterbrush	2	M	50		100
6	mtn mah	3	M	75		100
7	juniper	1	Y	5		100
8	pinyon	1	Y	5		100
9	mtn mah	3	M	75		100
10	pinyon	1	Y	5		100
11	juniper	1	M	5		100
12	mtn mah	3	M	75		100
13	mtn mah	5	M	50		90
14	mtn mah	2	M	50		100
15	mtn mah	3	M	75		100
16	bitterbrush	2	M	50		100
17	juniper	4	M	5		95
18	pinyon	1	S	0		100
19	pinyon	1	M	5		100
20	juniper	4	M	5		70
21	bitterbrush	2	M	50		100
22	juniper	1	M	5		100
23	bitterbrush	2	M	25		100
24	pinyon	1	Y	5		100
25	juniper	1	Y	5		100

RBOSP PROGRESS REPORT

[illegible]

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P - J Sample Unit #: 33

T2S R99W S 14 1/4 1/4 S NW/SE Date: 4/29/76

Aspect (degrees) 350 Slope (degrees) 5 Elevation (feet) 7000

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Serviceberry	3	M	75	N/A	100%
2	serviceberry	2	M	25		100
3	Serviceberry	2	D	50		100
4	serviceberry	1	D	25		100
5	pinyon	4	M	5		20
6	mtn mahog.	3	M	75		100
7	pinyon	1	M	5		100
8	mtn mahog.	3	M	75		100
9	Serviceberry	1	M	5		100
10	mtn mahog	2	D	25		100
11	mtn mah	3	M	75		100
12	mtn mah	2	M	75		100
13	pinyon	1	D	0		100
14	pinyon	1	M	5		100
15	pinyon	4	M	5		20
16	mtn mah	3	M	75		100
17	pinyon	4	M	5		20
18	juniper	4	D	5		5
19	pinyon	4	M	5		55
20	pinyon	4	M	5		10
21	Serviceberry	1	M	5		100
22	serviceberry	1	M	25		100
23	mtn mah	3	M	75		100
24	pinyon	1	Y	0		100
25	Serviceberry	1	M	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P - J Sample Unit #: 84

T 2S R 99W S 23 1/4 1/4 S SW/SW Date: 4/29/76

Aspect (degrees) 90 Slope (degrees) 5 Elevation (feet) 7150

Field Analyst(s): Turner QA Check: brm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	bitterbrush	2	M	25	N/A	100%
2	pinyon	4	M	5		20
3	bitterbrush	2	D	25		100
4	juniper	1	M	5		100
5	bitterbrush	2	M	50		100
6	bitterbrush	2	M	50		100
7	bitterbrush	2	M	50		100
8	bitterbrush	1	M	25		100
9	juniper	1	M	5		100
10	pinyon	4	M	5		25
11	pinyon	4	M	5		25
12	pinyon	4	M	5		25
13	juniper	4	M	5		90
14	bitterbrush	2	M	25		100
15	juniper	1	Y	5		100
16	juniper	1	Y	5		100
17	sage	1	M	5		100
18	sage	1	M	5		100
19	pinyon	4	M	5		15
20	pinyon	4	M	5		20
21	sage	1	Y	5		100
22	juniper	4	[illegible]	5		5
23	Sage	1	M	5		100
24	juniper	4	M	5		5
25	pinyon	1	Y	5		100

RBOSP PROGRESS REP

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J Sample Unit #: [illegible]

T 25 R 99w S 23 1/4 1/4 S Sw/Sw Date: 4/12/76

Aspect (degrees) 290 Slope (degrees) [illegible] Elevation (feet) 7150

Field Analyst(s): Turner QA Check: bmw 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	mtn. mah.	2	M	25	N/A	100%
2	pinyon	4	M	5		80
3	Bitterbrush	1	M	25		100
4	[illegible]	2	M	50		100
5	Rabbitbrush	3	M	75		100
6	sage	1	M	5		100
7	sage	1	M	5		100
8	pinyon	1	Y	5		100
9	Bitterbrush	2	M	50		100
10	Bitterbrush	3	M	50		100
11	juniper	1	Y	0		100
12	pinyon	1	D	0		100
13	pinyon	1	Y	5		100
14	[illegible]	3	M	25		100
15	pinyon	1	Y	0		100
16	pinyon	1	Y	0		100
17	juniper	1	Y	0		100
18	pinon	1	M	5		100
19	serviceberry	1	D	5		100
20	sage	1	M	5		100
21	pinyon	1	Y	5		100
22	sage	1	Y	0		100
23	pinyon	4	M	5		80
24	sage	1	Y	5		100
25	sage	1	D	5		100

RBOSP PROGRESS RE

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 86
T 2S R 99W S 6 1/4 1/4 S NE/SE Date: 4/29/76
Aspect (degrees) 50 Slope (degrees) 5 Elevation (feet) 8000
Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Serviceberry	1	M	25	N/A	100%
2	Sage	1	m	5		100
3	serviceberry	1	m	5		100
4	Snowberry	1	m	5		100
5	snowberry	1	m	5		100
6	Serviceberry	1	m	5		100
7	snowberry	1	m	5		100
8	snowberry	1	m	5		100
9	serviceberry	1	M	25		100
10	snowberry	1	m	5		100
11	Sage	1	D	5		100
12	snowberry	1	m	5		100
13	rabbitbrush	1	m	5		100
14	snowberry	1	m	5		100
15	serviceberry	1	m	5		100
16	serviceberry	1	M	25		100
17	Snowberry	1	m	5		100
18	serviceberry	4	m	5		95
19	snowberry	1	m	5		100
20	Sage	1	m	5		100
21	Sage	1	m	5		100
22	Sage	1	m	5		100
23	snowberry	1	m	5		100
24	serviceberry	4	m	25		90
25	snowberry	1	m	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 87

T 2S R 99W S 5 1/4 1/4 S SE/NW Date: 4/29/76

Aspect (degrees) 140 Slope (degrees) 45 Elevation (feet) 7800

Field Analyst(s): Thorpe QA Check: bvm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	snowberry	1	m	5	N/A	100%
2	sage	1	m	5		100
3	bitterbrush	3	m	95		100
4	snowberry	1	m	5		100
5	serviceberry	2	m	50		100
6	sage	1	m	5		100
7	sage	1	m	5		100
8	serviceberry	4	m	5		85
9	serviceberry	4	m	5		90
10	snowberry	1	m	5		100
11	sage	1	m	5		100
12	bitterbrush	3	m	95		100
13	sage	1	m	5		100
14	bitterbrush	3	m	75		100
15	serviceberry	1	m	25		100
16	sage	1	m	5		100
17	bitterbrush	1	m	75		100
18	sage	1	m	5		100
19	serviceberry	2	m	50		100
20	bitterbrush	2	m	50		100
21	bitterbrush	6	m	50		100
22	serviceberry	4	m	5		85
23	snowberry	1	m	5		100
24	~~Serv~~ bitterbrush	2	m	50		100
25	sage	1	m	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 88

T 2S R 99W S 5 1/4 1/4 S NW/NW Date: 4/29/76

Aspect (degrees) 310 Slope (degrees) 25 Elevation (feet) 7800

Field Analyst(s): Turner QA Check: bw 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	snowberry	1	m	5	N/A	100%
2	serviceberry	1	m	5		100
3	serviceberry	1	m	25		100
4	sage	1	m	5		100
5	serviceberry	1	m	5		100
6	sage	1	m	5		100
7	snowberry	1	m	5		100
8	serviceberry	4	m	5		90
9	sage	1	m	5		100
10	serviceberry	4	m	5		95
11	snowberry	1	m	5		100
12	sage	1	m	5		100
13	serviceberry	4	m	5		95
14	snowberry	1	m	5		100
15	sage	1	m	5		100
16	serviceberry	4	m	5		95
17	snowberry	1	m	5		100
18	serviceberry	4	m	5		80
19	snowberry	1	m	5		100
20	serviceberry	1	m	5		100
21	snowberry	1	m	5		100
22	sage	1	m	5		100
23	sage	1	m	5		100
24	serviceberry	1	m	5		100
25	snowberry	1	m	5		100

RBOSP PROGRESS REPORT

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: M+CO Brush Sample Unit #: 89

T 2S R 99W S 32 1/4 1/4 S SW/SE Date: 4/28/76

Aspect (degrees) 90 Slope (degrees) 5 Elevation (feet) 7600

Field Analyst(s): Turner QA Check: bnn 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Sage	1	Y	5	N/A	100%
2	Serviceberry	1	m	5		100
3	Snowberry	1	m	5		100
4	Sage	1	m	5		100
5	Sage	1	m	5		100
6	Snowberry	1	m	5		100
7	Serviceberry	4	m	5		90
8	Sage	1	D	5		100
9	Sage	1	m	5		100
10	Snowberry	1	m	5		100
11	Serviceberry	4	m	5		95
12	Snowberry	1	m	5		100
13	Sage	1	m	5		100
14	Sage	1	m	5		100
15	Serviceberry	1	m	5		100
16	Sage	1	m	5		100
17	Serviceberry	4	m	5		95
18	Sage	1	m	5		100
19	Serviceberry	4	m	5		95
20	Sage	1	m	5		100
21	Sage	1	m	5		100
22	Sage	1	m	5		100
23	Snowberry	1	m	5		100
24	Serviceberry	4	m	5		95
25	Serviceberry	4	m	5		95

RBOSP PROGRESS REPO

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 90

T 2S R 99W S 32 1/4 1/4 S NE/SW Date:

Aspect (degrees) 320 Slope (degrees) 5 Elevation (feet) 7600

Field Analyst(s): Turner QA Check: hm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Sage	1	M	5	N/A	100%
2	Sage	1	m	5		100
3	Serviceberry	4	m	5		95
4	Sage	1	m	5		100
5	Sage	1	m	5		100
6	Serviceberry	4	m	5		95
7	Snowberry	1	m	5		100
8	Sage	1	D	5		100
9	Sage	1	m	5		100
10	Sage	1	M	0		100
11	Sage	1	m	5		100
12	Snowberry	1	m	5		100
13	Serviceberry	2	M	50		100
14	Serviceberry	4	m	5		90
15	Snowberry	1	m	5		100
16	Sage	1	m	5		100
17	Serviceberry	4	M	5		90
18	Sage	1	m	5		100
19	Sage	1	m	5		100
20	Snowberry	1	m	5		100
21	Serviceberry	1	m	5		100
22	Sage	1	m	5		100
23	Sage	1	m	5		100
24	Serviceberry	1	m	25		100
25	Snowberry	1	m	5		100

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RBOSP PROGRESS REPORT

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 91

T 1S R 100W S 14 1/4 1/4 SNE/SE Date: 4/30/76

Aspect (degrees) 340 Slope (degrees) 10 Elevation (feet) [illegible]

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Sage	1	m	5	N/A	100%
2	Snowberry	1	m	5		100
3	Serviceberry	4	m	5		30
4	Snowberry	1	m	5		100
5	Sage	1	m	5		100
6	Snowberry	1	m	5		100
7	Sage	1	m	5		100
8	Serviceberry	4	m	5		85
9	Snowberry	1	m	5		100
10	Snowberry	1	m	5		100
11	Snowberry	1	m	5		100
12	Serviceberry	4	m	5		50
13	Snowberry 0	1	m	5		100
14	[illegible]	1	m	5		100
15	Snowberry	1	m	5		100
16	Serviceberry	4	m	5		[illegible]
17	Snowberry	1	m	5		100
18	[illegible]	1	m	5		100
19	Snowberry	1	m	5		100
20	Sage 0	1	m	5		100
21	Serviceberry	[illegible]	m	5		[illegible]
22	Snowberry 0	1	m	5		100
23	Serviceberry	[illegible]	m	[illegible]		[illegible]
24	Snowberry 0	1	m	5		
25	Serviceberry	4	m	5		[illegible]

RBOSP PROGRESS REPORT

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 02

T 1S R 103W S 14 1/4 1/4 S SE/SE Date: [illegible]/30/76

Aspect (degrees) [illegible] Slope (degrees) 10 Elevation (feet) [illegible]

Field Analyst(s): Turner QA Check: bmw 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	[illegible]	1	m	5	n/a	[illegible]
2	serviceberry	4	m	5		90
3	snowberry	1	m	5		100
4	snowberry	1	m	5		100
5	snowberry	1	m	5		100
6	snowberry	1	m	5		100
7	serviceberry	4	D	5		90
8	snowberry	1	m	5		100
9	sage	1	m	5		100
10	snowberry	1	m	5		100
11	serviceberry	4	m	5		90
12	serviceberry	1	m	5		100
13	snowberry	1	m	5		100
14	serviceberry	1	m	5		100
15	serviceberry	1	m	5		100
16	sage	1	m	5		100
17	snowberry	1	m	5		100
18	snowberry	1	m	5		100
19	sage	1	m	5		100
20	serviceberry	4	m	5		90
21	sage	1	m	5		100
22	snowberry	1	m	5		100
23	serviceberry	4	m	5		90
24	snowberry	1	m	5		100
25	sage	1	m	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: MixED Brush Sample Unit #: 93

T 1S R [illegible] S 13 1/4 1/4 S [illegible] Date: 4/30/76

Aspect (degrees) 340 Slope (degrees) 5 Elevation (feet) 7850

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	sage	1	M	5	N/A	100%
2	snowberry	1	m	5		100
3	serviceberry	1	m	5		100
4	snowberry	1	m	5		100
5	sage	1	m	5		100
6	sage	1	m	5		100
7	snowberry	1	m	5		100
8	snowberry	1	m	5		100
9	serviceberry	4	m	5		95
10	snowberry	1	m	5		100
11	sage	1	m	5		100
12	snowberry	1	m	5		100
13	serviceberry	4	m	5		90
14	snowberry	1	m	5		100
15	sage	1	m	5		100
16	snowberry	1	m	5		100
17	serviceberry	1	m	5		100
18	snowberry	1	m	5		100
19	sage	1	m	5		100
20	sage	1	m	5		100
21	sage	1	m	5		100
22	sage	1	m	5		100
23	snowberry	1	m	5		100
24	sage	1	m	5		100
25	serviceberry	4	m	5		95

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 94

T 1S R 100W S 13 1/4 1/4 S NE/SW Date: 4/30/76

Aspect (degrees) 50 Slope (degrees) 25 Elevation (feet) 7850

Field Analyst(s): [illegible] QA Check: bm 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Sage	1	M	5	N/A	100%
2	[illegible]	1	M	5		100
3	Serviceberry	4	M	5		95
4	Snowberry 0	1	M	5		100
5	Sage	1	M	5		100
6	Sage	1	M	5		100
7	Sage	1	M	5		100
8	Sage	1	M	5		100
9	Sage	1	M	5		100
10	Sage	1	Y	0		100
11	Snowberry	1	M	5		100
12	Serviceberry	4	M	5		95
13	Snowberry 0	1	M	5		100
14	Sage	1	M	5		100
15	Sage	1	M	5		100
16	Snowberry	1	M	5		100
17	Snowberry	1	M	5		100
18	Serviceberry	4	M	5		95
19	Snowberry	1	M	5		100
20	Serviceberry	1	M	5		100
21	Snowberry 0	1	M	5		100
22	[illegible]	1	M	5		100
23	Sage	1	M	5		100
24	[illegible]	1	Y	0		100
25	Sage	1	M	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 15

T 15 R 100W S 13 1/4 1/4 S SW/NE Date: 4/30/76

Aspect (degrees) 40 Slope (degrees) 15 Elevation (feet)

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Snowberry	1	m	5	N/A	100%
2	Serviceberry	1	m	25		100
3	Serviceberry	2	m	25		100
4	Sage	1	m	5		100
5	Serviceberry	4	D	5		95
6	Sage	1	m	5		100
7	Sage	1	m	5		100
8	Sage	1	m	5		100
9	Serviceberry	2	m	25		100
10	Sage	1	m	5		100
11	Sage	1	m	5		100
12	Sage	1	m	5		100
13	Snowberry	1	m	5		100
14	Serviceberry	5	m	25		90
15	Sage	1	m	5		100
16	Serviceberry	2	m	25		100
17	Snowberry	1	m	5		100
18	Sage	1	m	5		100
19	Snowberry	1	m	5		100
20	Sage	1	m	5		100
21	Serviceberry	2	m	50		100
22	Sage	1	D	0		100
23	Sage	1	m	5		100
24	Sage	1	m	5		100
25	Serviceberry	2	m	50		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 96

T 1S R 100W S 13 1/4 1/4 S SE/NW Date: 4/30/76

Aspect (degrees) 350 Slope (degrees) 5 Elevation (feet) 7700

Field Analyst(s): Turner QA Check: lum 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	1	m	5	N/A	100%
2	sage	1	m	5		100
3	sage	1	m	5		100
4	serviceberry	1	m	5		100
5	sage	1	D	5		100
6	serviceberry	1	m	5		100
7	serviceberry	1	m	5		100
8	serviceberry	4	m	95		90
9	sage	1	m	5		100
10	sage	1	m	5		100
11	serviceberry	1	m	5		100
12	serviceberry	4	D	5		90
13	sage	1	m	5		100
14	serviceberry	4	m	25		90
15	sage	1	m	5		100
16	serviceberry	2	m	25		100
17	sage	1	m	5		100
18	serviceberry	1	m	5		100
19	serviceberry	1	m	5		100
20	sage	1	m	5		100
21	sage	1	m	5		100
22	sage	1	m	5		100
23	serviceberry	1	m	5		100
24	serviceberry	1	m	5		100
25	serviceberry	1	m	5		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J | Mixed Brush Sample Unit #: 97

T 1S R 99W S 7 1/4 1/4 S SW/SW Date: 4/20/76

Aspect (degrees) 290 Slope (degrees) 5 Elevation (feet) 7450

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	mtn mah	2	M	25	N/A	100%
2	mtn mah	2	M	50		100
3	mtn mah	2	M	50		100
4	mtn mah	5	M	25		95
5	sage	1	M	5		100
6	mtn mah	2	M	50		100
7	mtn mah	2	M	50		100
8	mtn mah	2	M	50		100
9	serviceberry	1	M	25		100
10	pinyon	4	M	25		10
11	serviceberry	2	M	50		100
12	mtn mah	2	M	25		100
13	serviceberry	1	M	5		100
14	mtn mah	2	M	50		100
15	pinyon	1	Y	0		100
16	serviceberry	4	M	5		90
17	serviceberry	1	M	5		100
18	mtn mah	2	M	50		100
19	mtn mah	2	M	50		100
20	mtn mah	4	M	25		95
21	mtn mah	2	M	50		100
22	mtn mah	3	M	75		100
23	serviceberry	2	M	50		100
24	serviceberry	1	M	5		100
25	mtn mah	1	M	25		100

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J / Mixed Brush Sample Unit #: 98

T 1S R 99W S 7 1/4 1/4 S SW/SW Date: 4/30/76

Aspect (degrees) 150 Slope (degrees) 5 Elevation (feet) 7450

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	mtn mah	2	m	50	N/A	100%
2	mtn mah	3	m	75		100
3	mtn mah	2	m	50		100
4	pinyon	1	m	25		100
5	mtn mah	2	m	25		100
6	juniper	4	m	5		15
7	mtn mah	3	m	75		100
8	mtn mah	2	m	50		100
9	pinyon	1	m	5		100
10	mtn mah	1	m	25		100
11	pinyon	1	m	5		100
12	mtn mah	2	m	50		100
13	mtn mah	2	m	50		100
14	mtn mah	2	m	50		100
15	serviceberry	1	m	5		100
16	serviceberry	1	m	5		100
17	mtn mah	3	m	75		100
18	juniper	4	O	5		15
19	serviceberry	1	m	5		100
20	pinyon	1	Y	0		100
21	mtn mah	4	m	5		90
22	serviceberry	1	m	25		100
23	serviceberry	1	m	5		100
24	serviceberry	1	m	5		100
25	mtn mah	3	m	75		100

RBOSP PROGRESS REPORT

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J / Mixed Brush Sample Unit #: 99

T 1S R [illegible] S 7 1/4 1/4 S [illegible] Date: 4/30/76

Aspect (degrees) 350 Slope (degrees) 25 Elevation (feet) [illegible]

Field Analyst(s): Turner QA Check: [illegible] 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	serviceberry	1	M	5	N/A	100%
2	pinyon	4	m	5		20
3	serviceberry	1	m	5		100
4	pinyon	4	m	5		50
5	sage	1	m	5		100
6	pinyon	1	M	25		100
7	sage	1	m	5		100
8	sage	1	m	5		100
9	pinyon	4	m	25		90
10	sage	1	m	5		100
11	sage	1	m	5		100
12	mtn mah	3	m	75		100
13	serviceberry	1	m	5		100
14	sage	1	m	5		100
15	serviceberry	1	m	5		100
16	pinyon	4	m	5		90
17	serviceberry	1	m	5		100
18	serviceberry	1	m	5		100
19	sage	1	m	5		100
20	sage	1	D	5		100
21	sage	1	Y	5		100
22	serviceberry	1	m	5		100
23	sage	1	m	5		100
24	sage	1	D	5		100
25	sage	1	m	5		100

RBOSP PROGRESS REPO

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BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: P-J/mixed Brush Sample Unit #: 100

T 1S R 99W S 7 1/4 1/4 S SE/NE Date: 4/30/76

Aspect (degrees) 90 Slope (degrees) <5 Elevation (feet) 7300

Field Analyst(s): Turner QA Check: 5-4-76

No.	Species	Form Class	Age Class	Leader Use	Hedging Class	Availability
1	Serviceberry	1	M	5	N/A	100%
2	serviceberry	1	m	5		100
3	Serviceberry	1	m	5		100
4	mtn mah	1	m	25		100
5	mtn mah	1	m	25		100
6	juniper	4	m	5		5
7	serviceberry	1	m	5		100
8	juniper	7	m	0		0
9	mtn mah	2	m	50		100
10	mtn mah	1	m	25		100
11	mtn mah	1	m	25		100
12	Serviceberry	1	m	5		100
13	mtn mah	2	m	50		100
14	juniper	4	m	5		5
15	juniper	4	m	5		5
16	mtn mah	3	m	75		100
17	mtn mah	3	m	75		100
18	Serviceberry	4	m	5		85
19	mtn mah	2	m	50		100
20	serviceberry	4	m	5		90
21	juniper	4	m	5		15
22	mtn mah	1	m	25		100
23	mtn mah	1	m	25		100
24	mtn mah	4	M	50		85
25	mtn mah	3	m	75		100

RBOSP PROGRESS REPOR

2.4 Aquatic Ecology

QUARTERLY REPORT
JANUARY - MARCH 1976
FOR
RIO BLANCO OIL SHALE PROJECT

SUBMITTED TO
CDM/LIMNETICS
DENVER, COLORADO

SUBMITTED BY
ECOLOGICAL SCIENCES DIVISION
NUS CORPORATION
PITTSBURGH, PENNSYLVANIA
HOUSTON, TEXAS
AND
DENVER, COLORADO

JUNE, 1976

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Vice President and
General Manager
Ecological Sciences Division

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PREFACE

On September 9, 1974, NUS Corporation was selected by the Rio Blanco Oil Shale Project (RBOSP) and Limnetics, Incorporated to perform the Aquatic Baseline Data Accumulation Program for Federal Oil Shale Tract C-a. On October 15, 1974, the aquatic sampling program was initiated; during March 1975, NUS submitted the initial quarterly data report covering the period October 1974 - January 1975. In March, June, September and December 1975, and in March 1976, data reports for inclusion in RBOSP Progress Reports 2, 3, 4, 5 and 6, respectively, were submitted. This data report is being submitted to Limnetics, Incorporated for inclusion in RBOSP Progress Report 7. This report includes data from the following sampling periods: November - December 1975 (zooplankton), February 1976 (water quality), and April 1976 (all disciplines except water quality). The intent of this report is to present the data accumulated and analyzed since Progress Report 6. Only limited interpretation of this data has been incorporated.

2.4 AQUATIC STUDIES

2.4.0 Introduction

2.4.0.1 Program Objectives

The Aquatic Baseline Data Accumulation Program is designed to incorporate the environmental studies described in the Federal Register, Volume 39, Number 230, Part 3, Oil Shale Lease Environmental Stipulations and in the Tract C-a Exploratory Plan of May, 1974. The overall objective for the aquatic program is to characterize the existing aquatic ecological communities in the vicinity of Tract C-a. These baseline studies will inventory the aquatic habitats which may be affected by the development of oil shale on and around Tract C-a; and will allow determination of species composition, productivity, importance to man, and relative uniqueness of aquatic habitats and species. The aquatic baseline program includes the collection and analysis of field data and an on-going survey of pertinent literature. Since most of the streams on and near Tract C-a are intermittent and since most of the permanent aquatic ecosystems occur off tract, characterization of the permanent streams will be emphasized.

2.4.0.2 Sampling Locations

The sites of the various sampling stations have been chosen to represent the broadest possible range of aquatic habitats available. A total of 35 sampling stations has been established. Because emphasis in this aquatic program has been given to the permanent streams near Tract C-a, 18 of the stations are located on the White River and Yellow Creek (near its confluence with the White River). The locations of the aquatic sampling stations are depicted in Figure 2.4-1. The description of each of these locations is presented in detail in Section 2.4.1 of the RBOSP Progress Report 2 and will not be repeated here. For convenience and ease of discussion, the sampling stations will be treated according to their geographical locations in the following manner: stations near the headwater areas west of Tract C-a (Stations 1 - 5); stations on Tract C-a (Stations 6 - 18); stations on Yellow Creek (Stations 19 - 22); and stations on the White River (Stations 23 - 35).

2.4.0.3 Schedule

The schedule of events for the RBOSP Aquatic Baseline Data Accumulation Program is presented as Table 2.4-1. The initial sampling was begun in October 1974; and sampling will continue through August 1976. At each sampling location all physical, chemical, and biological samples are obtained on the same day. Appendix F-1-1 lists the dates on which samples were collected in April 1976. During April, samples were collected at 29 locations (the number of sites sampled varies with the number of sites which are dry or inaccessible).

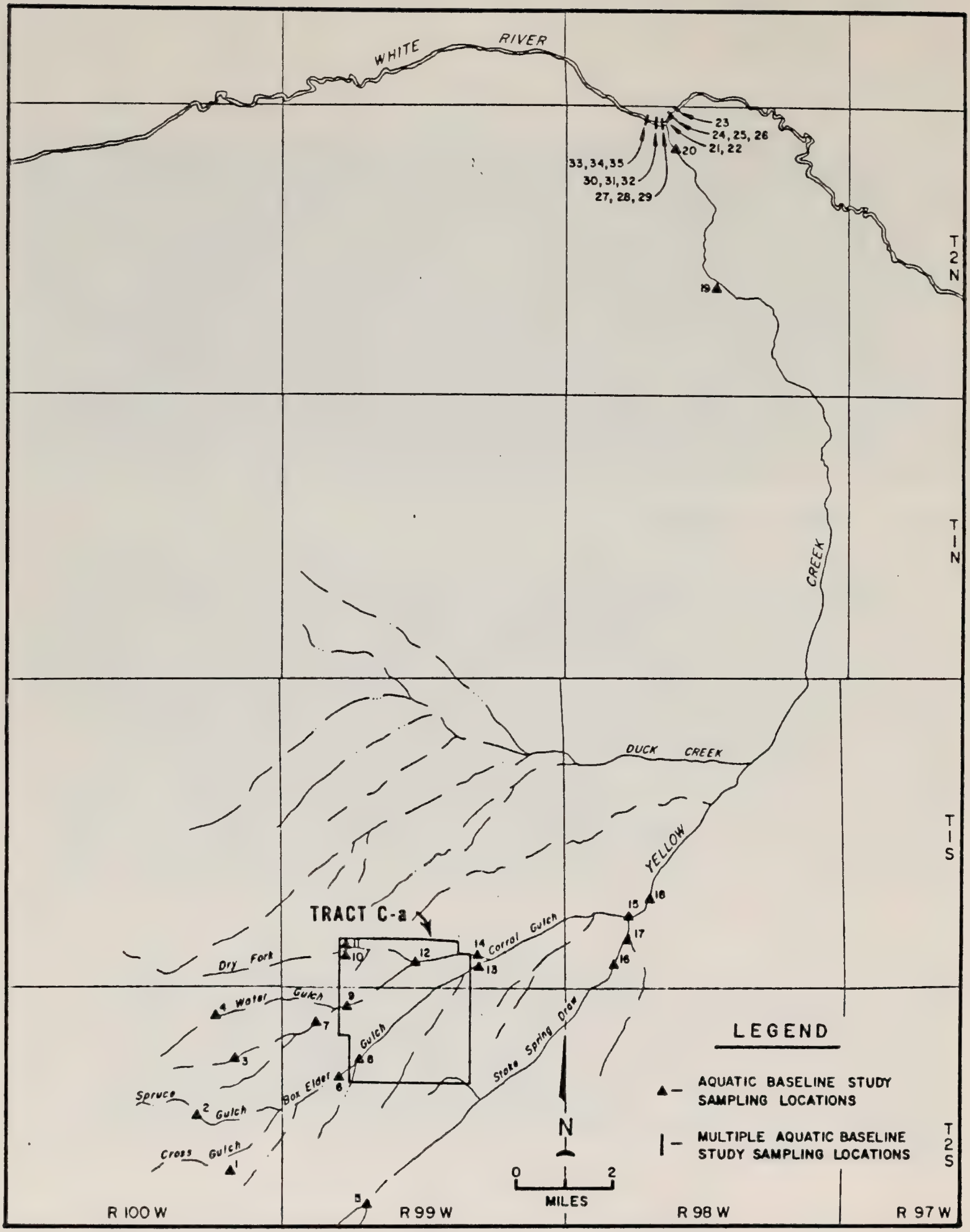

Figure 2.4-1. RBOSP Aquatic Sampling Locations

Table 2.4-1. Schedule for RBOSP Aquatic Baseline Data Accumulation Program

RIO BLANCO OIL SHALE PROJECT (GULF-STANDARD)	1975												1976											
Specification Task	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Start Date																								
Period of Performance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Start-up Time																								
Study Schedule																								
Field Studies																								
Physical	X			X		X	X		X	X		X				X		X	X		X			
Water Chemistry	X			X		X	X		X	X		X				X		X	X		X			
Plankton	X			X		X	X		X	X		X				X		X	X		X			
Periphyton	X			X		X	X		X	X		X				X		X	X		X			
Primary Prod.	X																							
Analysis						X	X		X	X						X		X	X		X			
Benthos				X		X	X		X	X		X				X		X	X		X			
Macrophytes	X			X		X	X		X	X		X				X		X	X		X			
Fish	X			X		X	X		X	X		X				X		X	X					
Rare and Endangered Species	X			X		X	X		X	X		X				X		X	X		X			
Spring and Seepages	X	X		X		X	X		X	X		X		X		X		X	X		X			
Miscellaneous Studies				X		X		X		X		X		X										
Lab Analysis	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Statistical Analysis	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Reports																								
Monthly	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Quarterly			X			X			X			X			X			X						
Annual																								
Draft Final																							X	
Comment Period																								X
Incorp. Comments																								X
Final Report																								X
Meetings																								
Bimonthly		X		X		X		X		X		X		X		X		X		X				

2.4.0.4 Report Motif

The presentation of results from the sampling period included in this report has been limited to a preliminary description of the data; and in the case of the physical and chemical parameters, only a limited number of selected parameters are discussed. No formal data interpretations have been attempted.

2.4.1 Physical Measurements and Water Chemistry

During the April 1976 sampling period, a total of six sampling sites was dry or inaccessible; the dry sites were Stations 6, 10 - 12, and 16; Station 1 was inaccessible.

The physical and chemical data collected during the April 1976 sampling are presented in Appendices F-2-1 and F-3-1. A summary of selected parameters for the Yellow Creek and White River stations is presented below.

April 1976

Parameter	Yellow Creek	White River
Specific conductance (μmhos)	2800 -4000	600 -1400
pH	8.2- 8.7	8.0- 8.5
Alkalinity, total ($CaCO_3$ mg/l)	853 -1658	184 - 249
Chloride (mg/l)	29 - 135	26 - 43
Sulfate (mg/l)	206 - 322	46 - 69
Dissolved solids (mg/l)	2301 -2673	426 -1041
Turbidity (JTU)	100 - 220	23 - 75
Dissolved oxygen (mg/l)	9.4- 10.8	9.7- 10.6
Temperature (°C)	11 - 19	7 - 17

The summary of selected physical and chemical data for the April sampling period reflects the spring conditions which prevailed during the sampling. Thus, turbidities and dissolved solids concentrations were generally high due to initial spring run-off.

Comparison of physical and chemical data from April 1976 with that from April 1975 indicates that water temperatures were slightly (1 to 5°C) warmer in 1976 in both the White River and Yellow Creek. Whereas turbidities in the White River were lower in April 1976 than during the previous year (42 - 110 JTU), they were higher in Yellow Creek (65 - 86 JTU in April 1975). The range of dissolved solids concentrations in the White River was higher in April 1976 than in April 1975 (453 - 644 mg/l), as was the range of specific conductances (630 - 850 μmhos in April 1975); primarily because of the high values recorded at Station 28 (the confluence with Yellow Creek). The range of dissolved solids in Yellow Creek was generally higher in April 1976 than during the previous April (2000 - 2500 mg/l) as was the range of specific conductance (2500 - 3700 μmhos).

The generally higher turbidity, specific conductance, and dissolved solids observed in Yellow Creek in April 1976 indicate that the spring run-off was nearer to its peak during the 1976 sampling than during the 1975 period.

APPENDIX F-1-1

DATES OF SAMPLING FOR
RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX F-1-1

DATES OF SAMPLING FOR RBOSP AQUATIC BASELINE STUDIES APRIL 1976.

Station	Date Sampled	Flow Condition
1	4-29-76	Inaccessible
2	4-29-76	Flowing
3	4-28-76	Flowing
4	4-27-76	Flowing
5	4-09-76	Flowing
6	4-22-76	Dry
7	4-27-76	Flowing
8	4-22-76	Flowing
9	4-27-76	Flowing
10	4-26-76	Dry
11	4-26-76	Dry
12	4-27-76	Dry
13	4-22-76	Flowing
14	4-26-76	Flowing
15	4-06-76	Flowing
16	4-06-76	Dry
17	4-06-76	Flowing
18	4-06-76	Flowing
19	4-09-76	Flowing
20	4-20-76	Flowing
21	4-20-76	Flowing
22	4-20-76	Flowing
23	4-16-76	Flowing
24	4-12-76	Flowing
25	4-12-76	Flowing
26	4-12-76	Flowing
27	4-15-76	Flowing
28	4-15-76	Flowing
29	4-15-76	Flowing
30	4-13-76	Flowing
31	4-13-76	Flowing
32	4-13-76	Flowing
33	4-14-76	Flowing
34	4-14-76	Flowing
35	4-14-76	Flowing

2.4.1 - Physical Measurements and Water Chemistry Data

APPENDIX F-2-1

PHYSICAL AND CHEMICAL CHARACTERISTICS OF STREAMS
RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX F-2-1

PHYSICAL AND CHEMICAL CHARACTERISTICS OF STREAMS
RBOSP AQUATIC BASELINE STUDIES, APRIL 1976.[1]

Station	Water Temperature (°C)	Conductivity[2] (μmhos/cm)			Dissolved Oxygen (mg/l)	Alkalinity Total (mg/l as $CaCO^3$)	pH
		s	m	s			
2	10		875		8.0	382	7.7
3	14		1000		9.0	326	8.3
4	13		1175		8.4	421	8.2
5	12		1500		12.9	410	8.3
7	11		1175		8.5	344	8.2
8	12		1050		9.0	381	7.6
9	7		1150		9.0	354	8.2
13	13		1150		7.8	435	7.5
14	9		1750		9.7	546	7.9
15	7		1800		6.3	505	7.6
17	7		1850		5.0	520	7.6
18	7		1850		6.5	501	7.6
19	11		2800		10.6	853	8.2
20	19		4000		9.4	1632	8.7
21	18		3900		10.2	1658	8.7
22	13		3900		10.8	1658	8.6
23	7	700;	700;	700	9.9	186	8.3
24	11	715;	715;	715	10.1	184	8.0
25	11	720;	715;	715	9.8	194	8.5
26	11	740;	725;	720	9.7	192	8.0
27	17	650;	640;	650	10.6	188	8.4
28	17	600;	600;	1400	10.6	249	8.4
29	11	730;	800;	1150	10.5	186	8.4
30	9	680;	650;	680	10.4	185	8.4

---

[1] Stations 1, 6, 10-12, and 16 were dry or inaccessible at the time of sampling.

[2] Measurements taken at each side (s) and middle (m) of stream wherever possible.

APPENDIX F-2-1 (Continued)

Station	Turbidity (JTU)	Color (APHA Units)	Odor	Substrate[1]	Width	Depth[2] (in.)		
						s	m	s
2	7	5-10	None	Gr,Sa	12"		1 "	
3	5	5-10	None	Gr,Sa	4"		3 "	
4	2	5-10	None	Gr,Sa	13"		2 "	
5	36	8-15	None	Gr,Sa	13"		3 "	
7	16	5-10	None	Gr,Sa	10"		2 "	
8	1	5-10	None	Gr	10"		2 "	
9	115	5-10	None	Gr,Sa	12"		2 "	
13	< 1	5-10	None	Gr,Sa	48"		4 "	
14	3	5-10	None	Sa	18"		4 "	
15	1	8-15	None	Gr,Sa	12"		1 "	
17	1	8-15	None	Gr,Sa	12"		1½"	
18	2	5-10	None	Gr,Sa	18"		1 "	
19	205	15-25	None	Gr	12"		7 "	
20	110	15-25	None	Gr	60"		4 "	
21	100	5-10	None	Gr	72"		4 "	
22	110	10-20	None	Gr	84"		5 "	
23	33	8-15	None	Co,Gr	36'	14";	16 ";	5"
24	25	5-10	None	Co	139'	4";	8 ";	14"
25	30	0- 5	None	Co	139'	26";	22 ";	16"
26	30	0- 5	None	Co	139'	6";	14 ";	28"
27	32	0- 5	None	Co	51'	4";	22 ";	8"
28	72	0- 5	None	Gr,Sa	78'	3";	22 ";	10"
29	43	5-10	None	Gr,Sa	25'	4";	12 ";	2"
30	55	5-10	None	Co	147'	22";	24 ";	2"

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[1] Co = Cobble; Gr = Gravel; Sa = Sand

[2] Measurements taken at each side (s) and middle (m) of stream wherever possible.

APPENDIX F-2-1 (Continued)

Station	Water Temperature (°C)	Conductivity (μmhos/cm)	Dissolved Oxygen (mg/l)	Alkalinity Total (mg/l as $CaCO^3$)	pH
		s m s			
31	9	680; 680; 680	10.0	187	8.4
32	9	700; 680; 650	10.0	203	8.4
33	13	700; 710; 700	10.0	183	8.4
34	9	710; 700; 720	9.7	189	8.4
35	9	700; 710; 720	9.9	184	8.4

APPENDIX F-2-1 (Continued)

Station	Turbidity (JTU)	Color (APHA Units)	Odor	Substrate	Width	Depth (in.)		
						s	m	s
31	60	5-10	None	Co	147'	17";	14";	20"
32	60	5-10	None	Co	147'	8";	14";	16"
33	72	5-10	None	Gr,Co	43'	18";	12";	10"
34	69	5-10	None	Gr,Sa	26'	14";	18";	2"
35	72	5-10	None	Gr,Sa	63'	1";	26";	18"

APPENDIX F-3-1

WATER CHEMISTRY DATA
RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX F-3-1

WATER CHEMISTRY DATA. RBOSP AQUATIC BASELINE STUDIES APRIL 1976.[1] (Data are expressed in mg/l unless otherwise noted.)

Station Replicate	Ammonia (N)	Calcium (Ca)	Organic Carbon(C) Dissolved	Total Organic Carbon(C)	Chloride (Cl)	Color[2] (F)
2-A	<0.1	102	5	6	6	5-10
2-B	<0.1	98	6	5	6	5-10
3-A	<0.1	76	3	6	8	5-10
3-B	<0.1	74	4	4	8	5-10
4-A	<0.1	108	10	10	6	5-10
4-B	<0.1	112	8	8	7	5-10
5-A	<0.1	96	< 1	2	13	10-20
5-B	<0.1	96	2	1	11	5-10
7-A	<0.1	86	7	4	7	5-10
7-B	<0.1	86	4	3	7	5-10
8-A	<0.1	86	6	6	11	5-10
8-B	<0.1	92	8	7	11	5-10
9-A	<0.1	86	6	16	7	5-10
9-B	<0.1	82	5	18	7	5-10
13-A	<0.1	88	8	6	11	5-10
13-B	<0.1	88	12	10	10	5-10
14-A	<0.1	108	12	8	16	5-10
14-B	<0.1	108	6	10	16	5-10
15-A	<0.1	96	1	< 1	18	10-20
15-B	<0.1	110	1	< 1	18	5-10
17-A	<0.1	110	3	< 1	18	10-20
17-B	<0.1	110	1	< 1	17	5-10
18-A	<0.1	110	3	1	18	5-10
18-B	<0.1	110	< 1	3	18	5-10

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[1] Stations 1, 6, 10 - 12, and 16 were dry or inaccessible at the time of sampling.

[2] Data for color are APHA units.

APPENDIX F-3-1 (Continued)

Station Replicate	Hardness ($CaCO_3$)	Magnesium (Mg)	Nitrate (N)	Nitrite (N)	Kjeldahl Nitrogen (N)	Odor	Ortho-Phosphate (P)	Total Phosphate (P)
2-A	469	49	0.3	<0.01	0.36	None	<0.01	0.09
2-B	440	51	0.3	<0.01	0.30	None	<0.01	0.06
3-A	369	46	<0.2	<0.01	0.10	None	<0.01	0.03
3-B	372	46	<0.2	<0.01	0.11	None	<0.01	0.04
4-A	473	60	0.8	<0.01	0.29	None	0.01	0.04
4-B	489	59	1.0	<0.01	0.29	None	0.01	0.04
5-A	494	76	<0.2	<0.01	0.39	None	<0.01	0.02
5-B	527	74	<0.2	<0.01	0.38	None	<0.01	0.02
7-A	402	52	0.4	<0.01	0.23	None	0.01	0.05
7-B	381	51	0.4	<0.01	0.16	None	<0.01	0.06
8-A	420	56	0.2	<0.01	0.10	None	0.02	0.02
8-B	438	53	0.2	<0.01	0.10	None	0.02	0.02
9-A	420	55	0.4	<0.01	1.20	None	0.01	0.60
9-B	453	51	0.4	<0.01	1.20	None	0.01	0.60
13-A	427	64	<0.2	<0.01	0.18	None	0.03	0.03
13-B	443	66	<0.2	<0.01	0.17	None	0.03	0.03
14-A	701	102	<0.2	<0.01	0.52	None	0.03	0.07
14-B	707	100	<0.2	<0.01	0.49	None	0.02	0.06
15-A	718	100	<0.2	<0.01	0.21	None	0.07	0.04
15-B	645	100	<0.2	<0.01	0.23	None	0.03	0.05
17-A	722	100	<0.2	<0.01	<0.10	None	0.03	0.03
17-B	728	100	<0.2	<0.01	0.11	None	0.03	0.04
18-A	474	100	<0.2	<0.01	0.30	None	0.03	0.04
18-B	625	110	<0.2	<0.01	0.20	None	0.03	0.04

APPENDIX F-3-1 (Continued)

Station Replicate	Potassium (K)	Soluble Silica (Si)	Sodium (Na)	Dissolved Solids	Suspended Solids	Sulfate (S)	Turbidity (JTU)
2-A	1.2	11.0	64	715	40	69	8
2-B	1.2	11.0	64	705	15	71	6
3-A	2.0	7.9	83	673	24	80	6
3-B	2.0	7.9	85	653	11	81	3
4-A	1.7	9.7	80	796	19	88	2
4-B	1.7	9.7	80	808	4	89	3
5-A	3.2	4.8	140	932	42	131	37
5-B	3.3	5.1	120	930	44	132	36
7-A	1.8	9.0	79	704	30	85	13
7-B	1.8	9.0	79	706	44	85	20
8-A	1.9	9.5	76	707	< 1	72	1
8-B	1.9	9.5	76	706	< 1	71	1
9-A	2.0	8.9	82	716	741	81	120
9-B	2.0	8.8	80	731	732	84	110
13-A	2.2	9.5	120	843	9	100	< 1
13-B	2.2	9.5	120	876	5	98	< 1
14-A	4.5	9.2	180	1280	12	168	3
14-B	4.5	9.3	180	1275	13	169	3
15-A	4.7	9.3	190	1263	3	180	1
15-B	4.7	9.4	170	1260	4	179	1
17-A	4.5	10.0	170	1271	5	178	1
17-B	4.5	10.0	190	1270	< 1	178	1
18-A	4.7	10.0	180	1276	3	175	3
18-B	4.7	9.9	180	1261	< 1	180	1

APPENDIX F-3-1 (Continued)

Station Replicate	Ammonia (N)	Calcium (Ca)	Organic Carbon(C) Dissolved	Total Organic Carbon(C)	Chloride (Cl)	Color (F)
19-A	<0.1	67	2	9	30	10-20
19-B	<0.1	66	<1	14	29	20-30
20-A	<0.1	28	<1	< 1	130	20-30
20-B	<0.1	27	2	< 1	131	10-20
21-A	<0.1	27	<1	5	132	5-10
21-B	<0.1	28	<1	5	134	5-10
22-A	<0.1	30	<1	< 1	135	10-20
22-B	<0.1	30	<1	< 1	134	10-20
23-A	<0.1	66	2	2	26	10-20
23-B	<0.1	67	2	2	27	5-10
24-A	<0.1	67	3	1	28	5-10
24-B	<0.1	66	1	1	29	5-10
25-A	<0.1	66	4	1	28	0- 5
25-B	<0.1	67	<1	< 1	28	0- 5
26-A	<0.1	67	<1	< 1	29	0- 5
26-B	<0.1	69	<1	1	28	0- 5
27-A	<0.1	65	<1	1	31	0- 5
27-B	<0.1	65	1	2	28	0- 5
28-A	<0.1	65	3	< 1	29	0- 5
28-B	<0.1	60	<1	< 1	43	0- 5
29-A	<0.1	64	2	5	28	5-10
29-B	<0.1	65	2	3	28	5-10
30-A	<0.1	63	2	4	27	5-10
30-B	<0.1	64	1	1	27	5-10

APPENDIX F-3-1 (Continued)

Station Replicate	Hardness ($CaCO_3$)	Magnesium (Mg)	Nitrate (N)	Nitrite (N)	Kjeldahl Nitrogen (N)	Odor	Ortho-Phosphate (P)	Total Phosphate (P)
19-A	999	170	<0.2	<0.01	2.00	None	0.05	0.45
19-B	1010	180	<0.2	<0.01	2.20	None	0.05	0.46
20-A	538	110	<0.2	<0.01	1.20	None	<0.01	0.23
20-B	543	110	<0.2	<0.01	1.20	None	<0.01	0.20
21-A	525	110	<0.2	<0.01	0.96	None	0.01	0.19
21-B	525	110	<0.2	<0.01	1.00	None	0.01	0.18
22-A	529	110	<0.2	<0.01	0.96	None	<0.01	0.19
22-B	538	110	<0.2	<0.01	1.10	None	0.01	0.18
23-A	262	22	<0.2	<0.01	0.32	None	0.01	0.08
23-B	262	22	<0.2	<0.01	0.32	None	<0.01	0.08
24-A	265	24	<0.2	<0.01	0.28	None	<0.01	0.07
24-B	265	23	<0.2	<0.01	0.25	None	<0.01	0.07
25-A	260	23	<0.2	<0.01	0.36	None	<0.01	0.09
25-B	262	23	<0.2	<0.01	0.32	None	0.01	0.10
26-A	267	23	<0.2	<0.01	0.28	None	<0.01	0.08
26-B	269	23	<0.2	<0.01	0.30	None	<0.01	0.08
27-A	262	23	<0.2	<0.01	0.28	None	<0.01	0.08
27-B	262	22	<0.2	<0.01	0.29	None	<0.01	0.09
28-A	246	24	<0.2	<0.01	0.28	None	<0.01	0.09
28-B	249	36	<0.2	<0.01	0.28	None	<0.01	0.10
29-A	260	24	<0.2	<0.01	0.27	None	0.01	0.10
29-B	262	23	<0.2	<0.01	0.31	None	0.01	0.10
30-A	256	23	<0.2	<0.01	0.41	None	<0.01	0.16
30-B	256	23	<0.2	<0.01	0.27	None	0.01	0.14

APPENDIX F-3-1 (Continued)

Station Replicate	Potassium (K)	Soluble Silica (Si)	Sodium (Na)	Dissolved Solids	Suspended Solids	Sulfate (S)	Turbidity (JTU)
19-A	5.7	7.7	390	2301	408	322	190
19-B	5.7	7.8	390	2333	536	308	220
20-A	6.5	3.4	820	2673	260	212	110
20-B	6.5	3.4	790	2659	269	213	110
21-A	6.5	3.8	890	2648	198	208	100
21-B	6.5	3.8	790	2628	195	206	100
22-A	6.4	4.0	800	2660	225	208	110
22-B	6.7	3.9	830	2662	233	208	110
23-A	2.0	5.9	49	445	45	49	35
23-B	2.0	5.9	49	434	41	49	32
24-A	2.1	5.9	51	441	61	48	23
24-B	2.1	6.0	49	441	54	49	28
25-A	2.1	5.9	50	448	93	49	30
25-B	2.1	6.0	50	439	68	49	30
26-A	2.1	5.9	50	443	74	46	30
26-B	2.1	5.9	51	449	67	48	30
27-A	2.1	6.0	51	440	98	48	35
27-B	2.1	6.0	51	444	80	48	30
28-A	2.1	6.1	54	925	153	48	70
28-B	2.8	5.9	150	1041	173	69	75
29-A	2.1	6.1	49	442	109	49	43
29-B	2.0	6.2	49	437	104	47	44
30-A	2.1	6.2	46	436	168	47	54
30-B	2.1	6.2	46	426	112	46	56

APPENDIX F-3-1 (Continued)

Station Replicate	Ammonia (N)	Calcium (Ca)	Organic Carbon(C) Dissolved	Total Organic Carbon(C)	Chloride (Cl)	Color (F)
31-A	<0.1	64	<1	3	27	5-10
31-B	<0.1	64	2	2	27	5-10
32-A	<0.1	63	1	<1	29	5-10
32-B	<0.1	64	<1	1	29	5-10
33-A	<0.1	65	<1	4	28	5-10
33-B	<0.1	64	<1	3	27	5-10
34-A	<0.1	64	1	3	27	5-10
34-B	<0.1	61	<1	5	27	5-10
35-A	<0.1	64	1	3	27	5-10
35-B	<0.1	64	<1	4	26	5-10

APPENDIX F-3-1 (Continued)

Station Replicate	Hardness ($CaCO_3$)	Magnesium (Mg)	Nitrate (N)	Nitrite (N)	Kjeldahl Nitrogen (N)	Odor	Ortho-Phosphate (P)	Total Phosphate (P)
31-A	253	23	<0.2	<0.01	0.51	None	0.01	0.15
31-B	258	24	<0.2	<0.01	0.54	None	0.01	0.15
32-A	227	25	<0.2	<0.01	0.36	None	<0.01	0.17
32-B	249	24	<0.2	<0.01	0.41	None	<0.01	0.15
33-A	257	25	<0.2	<0.01	0.47	None	<0.01	0.16
33-B	258	24	<0.2	<0.01	0.51	None	0.01	0.16
34-A	266	23	<0.2	<0.01	0.51	None	<0.01	0.15
34-B	261	22	<0.2	<0.01	0.51	None	<0.01	0.15
35-A	266	23	<0.2	<0.01	0.57	None	0.01	0.17
35-B	263	23	<0.2	<0.01	0.50	None	0.01	0.18

APPENDIX F-3-1 (Continued)

Station Replicate	Potassium (K)	Soluble Silica (Si)	Sodium (Na)	Dissolved Solids	Suspended Solids	Sulfate (S)	Turbidity (JTU)
31-A	2.2	6.1	51	437	211	52	62
31-B	2.1	6.3	52	438	214	48	59
32-A	2.2	6.1	61	471	181	48	60
32-B	2.2	6.2	61	472	195	47	60
33-A	2.2	6.3	51	454	184	48	75
33-B	2.2	6.3	51	453	168	49	70
34-A	2.3	6.3	51	466	156	46	69
34-B	2.3	6.3	51	456	162	48	70
35-A	2.3	6.4	52	464	167	49	75
35-B	2.3	6.4	52	461	166	49	69

2.4.2 Phytoplankton

Algal taxa observed to date in the April 1976 collections are listed in Appendix F-4-1. A total of 106 taxa has been observed in these samples. Quantitative data from one replicate of the April 1976 samples are presented in Appendix F-4-2.

Samples analyzed to date indicate that during April the most abundant phytoplankton taxa at the headwater stations were the diatoms *Navicula pelliculosa*, *Achnanthes minutissima*, and *Surirella ovata* and the chrysophyte *Chrysidiastrum ocellatum*. Phytoplankton abundance was generally low at the headwaters during April. At the tract stations, the most abundant taxa (based on analyses completed to date) were *Navicula pelliculosa*, *Chrysidiastrum ocellatum*, and unidentified flagellates. In Yellow Creek, the dominant phytoplankton taxa included *Synedra amphicephala*, *Nitzschia capitellata*, *Surirella ovata*, and unidentified flagellates, whereas in the White River, the most abundant taxa were *Navicula viridula*, *Gomphonema olivaceum*, *Nitzschia capitellata*, and *Surirella ovata*.

Comparison of phytoplankton data from April 1976 with those from April 1975 indicates that diatoms were generally the most abundant algal taxa in the phytoplankton of the study area during both years. Phytoplankton abundance was generally low throughout the study area and phytoplankton constitutes a secondary source of primary production (periphytic algae is the primary source) in waters of the area.

2.4.2 - Phytoplankton Data

APPENDIX F-4-1

ALGAL TAXA OBSERVED IN THE PHYTOPLANKTON DURING RBOSP AQUATIC BASELINE STUDIES APRIL 1976

APPENDIX F-4-1

ALGAL TAXA OBSERVED IN THE PHYTOPLANKTON DURING RBOSP AQUATIC BASELINE STUDIES, APRIL 1976.

CYANOPHYTA

- *LYNGBYA* SPP
- *OSCILLATORIA TENUIS*
- *OSCILLATORIA* SPP
- *ANABAENA* SPP
- *CALOTHRIX* SPP

CHLOROPHYTA

- *CHLAMYDOMONAS GLOBOSA*
- *ULOTHRIX* SPP
- *STIGEOCLONIUM* SPP
- *CLADOPHORA* SPP
- *ANKISTRODESMUS CONVOLUTUS*
- *SCENEDESMUS QUADRICAUDA*
- *CLOSTERIUM LEIBLEINII*
- *CHLOROPHYTA I*

CHRYSOPHYTA

- *BICOECA LACUSTRIS*
- *CHRYSIDIASTRUM OCELLATUM*
- *MELOSIRA DISTANS*
- *MELOSIRA ITALICA*
- *THALASSIOSIRA FLUVIATILIS*
- *CYCLOTELLA MENEGHINIANA*
- *STEPHANODISCUS ASTRAEA*

APPENDIX F-4-1 (Continued)

CHRYSOPHYTA

STEPHANODISCUS TENUIS
TABELLARIA FLOCCULOSA
DIATOMA HIEMALE
DIATOMA TENUE
DIATOMA VULGARE
MERIDION CIRCULARE
FRAGILARIA CAPUCINA
FRAGILARIA CONSTRUENS
FRAGILARIA CROTONENSIS
FRAGILARIA LEPTOSTAURON
FRAGILARIA PINNATA
FRAGILARIA VAUCHERIAE
HANNAEA ARCUS
SYNEDRA AMPHICEPHALA
SYNEDRA MINUSCULA
SYNEDRA PULCHELLA
SYNEDRA ULNA
COCCONEIS PEDICULUS
ACHNANTHES LANCEOLATA
ACHNANTHES MINUTISSIMA
RHOICOSPHENIA CURVATA

APPENDIX F-4-1 (Continued)

CHRYSOPHYTA

- GYROSIGMA ACUMINATUM
- PLEUROSIGMA DELICATULUM
- STAURONEIS PHOENICENTERON
- DIPLONEIS ELLIPTICA
- NAVICULA ARVENSIS
- NAVICULA CRYPTOCEPHALA
- NAVICULA CUSPIDATA
- NAVICULA LANCEOLATA
- NAVICULA MUTICA
- NAVICULA PELLICULOSA
- NAVICULA RADIOSA
- NAVICULA SALINARUM
- NAVICULA SALINARUM VAR. INTERMEDIA
- NAVICULA TRIPUNCTATA
- NAVICULA VIRIDULA
- NAVICULA SPP
- NAVICULA SP 1
- NAVICULA SP 2
- CALONEIS AMPHISBAENA
- CALONEIS BACILLUM
- PINNULARIA BOREALIS

APPENDIX F-4-1 (Continued)

CHRYSOPHYTA

PINNULARIA BREBISSONII
PINNULARIA GLOBICEPS
PINNULARIA VIRIDIS
AMPHORA OVALIS
AMPHORA OVALIS VAR. *PEDICULUS*
CYMBELLA AFFINIS
CYMBELLA MEXICANA
CYMBELLA MICROCEPHALA
CYMBELLA SINUATA
CYMBELLA VENTRICOSA
DIDYMOSPHENIA GEMINATA
GOMPHONEMA INTRICATUM
GOMPHONEMA OLIVACEUM
GOMPHONEMA PARVULUM
GOMPHONEMA VENTRICOSUM
AMPHIPRORA ALATA
EPITHEMIA SOREX
EPITHEMIA ZEBRA
RHOPALODIA GIBBA
CYLINDROTHECA GRACILIS
HANTZSCHIA AMPHIOXYS

APPENDIX F-4-1 (Continued)

CHRYSOPHYTA

NITZSCHIA ACICULARIS
NITZSCHIA APICULATA
NITZSCHIA CAPITELLATA
NITZSCHIA DENTICULA
NITZSCHIA DISSIPATA
NITZSCHIA FRUSTULUM
NITZSCHIA GRACILIS
NITZSCHIA HOLSATICA
NITZSCHIA HUNGARICA
NITZSCHIA LINEARIS
NITZSCHIA PALEA
NITZSCHIA TRYBLIONELLA
NITZSCHIA VERMICULARIS
CYMATOPLEURA SOLEA
SURIRELLA ANGUSTATA
SURIRELLA OVATA
SURIRELLA OVALIS

EUGLENOPHYTA

EUGLENA PROXIMA
EUGLENA SPP

PYRRHOPHYTA

PERIDINIUM SPP

CRYPTOPHYTA

CRYPTOMONAS EROSA

APPENDIX F-4-1 (Continued)

MICROFLAGELLATES

FLAGELLATE UNIDENTIFIED

APPENDIX F-4-2

DENSITIES OF ALGAL TAXA OBSERVED IN THE PHYTOPLANKTON
RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX -2

DENSITIES OF ALGAL TAXA OBSERVED IN THE PHYTOPLANKTON DURING RBOSP AQUATIC BASELINE STUDIES, APRIL 1976.

(Site = Station; Rep = Replicate)[1-2]

SITE = 2

TAXON	REP A	MEAN
CHLOROPHYTA		
STIGEOCLONIUM SPP	.14	.14
CHLOROPHYTA I	12.00	12.00
GROUP MEAN		12.14
CHRYSOPHYTA		
BICOECA LACUSTRIS	27.00	27.00
FRAGILARIA VAUCHERIAE	1.00	1.00
SYNEDRA AMPHICEPHALA	3.00	3.00
ACHNANTHES LANCEOLATA	8.00	8.00
ACHNANTHES MINUTISSIMA	53.00	53.00
NAVICULA ARVENSIS	3.00	3.00
NAVICULA CRYPTOCEPHALA	8.00	8.00
NAVICULA PELLICULOSA	19.00	19.00
CALONEIS BACILLUM	1.00	1.00
CYMBELLA AFFINIS	3.00	3.00
GOMPHONEMA INTRICATUM	7.00	7.00
NITZSCHIA CAPITELLATA	12.00	12.00
NITZSCHIA FRUSTULUM	3.00	3.00
NITZSCHIA HOLSATICA	3.00	3.00
NITZSCHIA PALEA	8.00	8.00
GROUP MEAN		159.00

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[1] Stations 1, 6, 10 - 12, and 16 were dry or inaccessible at the time of sampling.

APPENDIX F-4-2 (Continued)

SITE = 2

TAXON	REP A	MEAN
CHRYSOPHYTA		
SURIRELLA OVATA	1.00	1.00
GROUP MEAN		1.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	31.00	31.00
GROUP MEAN		31.00

APPENDIX F-4-2 (Continued)

SITE = 3

TAXON	REP A	MEAN
CHLOROPHYTA		
CHLOROPHYTA I	32.00	32.00
GROUP MEAN		32.00
CHRYSOPHYTA		
CHRYSIDIASTRUM OCELLATUM	127.00	127.00
STEPHANODISCUS TENUIS	14.00	14.00
DIATOMA HIEMALE	3.00	3.00
ACHNANTHES LANCEOLATA	11.00	11.00
ACHNANTHES MINUTISSIMA	30.00	30.00
NAVICULA ARVENSIS	22.00	22.00
NAVICULA CRYPTOCEPHALA	27.00	27.00
NAVICULA GREGARIA	5.00	5.00
NAVICULA MUTICA	22.00	22.00
NAVICULA PELLICULOSA	1223.00	1223.00
NAVICULA SP 2	65.00	65.00
PINNULARIA GLOBICEPS	22.00	22.00
AMPHORA OVALIS VAR. PEDICULUS	3.00	3.00
CYMBELLA MICROCEPHALA	14.00	14.00
CYMBELLA VENTRICOSA	5.00	5.00
GOMPHONEMA INTRICATUM	8.00	8.00
GROUP MEAN		1601.00

APPENDIX F-4-2 (Continued)

SITE = 3

TAXON	REP A	MEAN
CHRYSOPHYTA		
GOMPHONEMA OLIVACEUM	3.00	3.00
HANTZSCHIA AMPHIOXYS	5.00	5.00
NITZSCHIA CAPITELLATA	65.00	65.00
NITZSCHIA FRUSTULUM	35.00	35.00
NITZSCHIA PALEA	24.00	24.00
GROUP MEAN		132.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	14.00	14.00
GROUP MEAN		14.00

APPENDIX F-4-2 (Continued)

SITE = 4

TAXON	REP A	MEAN
CHLOROPHYTA		
CHLOROPHYTA I	62.00	62.00
GROUP MEAN		62.00
CHRYSOPHYTA		
CHRYSIDIASTRUM OCELLATUM	389.00	389.00
ACHNANTHES LANCEOLATA	32.00	32.00
ACHNANTHES MINUTISSIMA	310.00	310.00
GYROSIGMA ACUMINATUM	3.00	3.00
NAVICULA ARVENSIS	5.00	5.00
NAVICULA CRYPTOCEPHALA	181.00	181.00
NAVICULA MUTICA	5.00	5.00
NAVICULA PELLICULOSA	124.00	124.00
NAVICULA TRIPUNCTATA	8.00	8.00
NAVICULA VIRIDULA	8.00	8.00
NAVICULA SP 2	19.00	19.00
PINNULARIA BREBISSONII	.08	.08
AMPHORA OVALIS	3.00	3.00
AMPHORA OVALIS VAR. PEDICULUS	3.00	3.00
GUMPHONEMA INTRICATUM	14.00	14.00
GOMPHONEMA PARVULUM	3.00	3.00
GROUP MEAN		1107.08

APPENDIX F-4-2 (Continued)

SITE = 4

TAXON	REP A	MEAN
CHRYSOPHYTA		
NITZSCHIA ACICULARIS	8.00	8.00
NITZSCHIA CAPITELLATA	92.00	92.00
NITZSCHIA FRUSTULUM	62.00	62.00
NITZSCHIA LINEARIS	27.00	27.00
NITZSCHIA PALEA	43.00	43.00
SURIRELLA OVATA	3.00	3.00
GROUP MEAN		235.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	89.00	89.00
GROUP MEAN		89.00

APPENDIX F-4-2 (Continued)

SITE = 5

TAXON	REP A	MEAN
CHLOROPHYTA		
CHLAMYDOMONAS GLOBOSA	3.00	3.00
CHLOROPHYTA I	59.00	59.00
GROUP MEAN		62.00
CHRYSOPHYTA		
DIATOMA TENUE	3.00	3.00
SYNEDRA AMPHICEPHALA	49.00	49.00
COCCONEIS PEDICULUS	8.00	8.00
ACHNANTHES LANCEOLATA	16.00	16.00
ACHNANTHES MINUTISSIMA	127.00	127.00
NAVICULA ARVENSIS	16.00	16.00
NAVICULA CRYPTOCEPHALA	140.00	140.00
NAVICULA CUSPIDATA	5.00	5.00
NAVICULA LANCEOLATA	5.00	5.00
NAVICULA PELLICULOSA	35.00	35.00
NAVICULA RADIOSA	3.00	3.00
NAVICULA VIRIDULA	14.00	14.00
CYMBELLA AFFINIS	3.00	3.00
CYMBELLA VENTRICOSA	5.00	5.00
GOMPHONEMA INTRICATUM	81.00	81.00
GROUP MEAN		510.00

APPENDIX F-4-2 (Continued)

SITE = 5

TAXON	REP A	MEAN
CHRYSOPHYTA		
GOMPHONEMA OLIVACEUM	5.00	5.00
CYLINDROTHECA GRACILIS	3.00	3.00
NITZSCHIA ACICULARIS	105.00	105.00
NITZSCHIA APICULATA	3.00	3.00
NITZSCHIA CAPITELLATA	127.00	127.00
NITZSCHIA DISSIPATA	5.00	5.00
NITZSCHIA FRUSTULUM	27.00	27.00
NITZSCHIA LINEARIS	32.00	32.00
NITZSCHIA PALEA	32.00	32.00
SURIRELLA OVATA	400.00	400.00
SURIRELLA OVALIS	11.00	11.00
GROUP MEAN		750.00
EUGLENOPHYTA		
EUGLENA SPP	3.00	3.00
GROUP MEAN		3.00
PYRRHOPHYTA		
PERIDINIUM SPP	3.00	3.00
GROUP MEAN		3.00

APPENDIX F-4-2 (Continued)

SITE = 5

TAXON	REP A	MEAN
CRYPTOPHYTA		
CRYPTOMONAS EROSA	11.00	11.00
GROUP MEAN		11.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	35.00	35.00
GROUP MEAN		35.00

APPENDIX F-4-2 (Continued)

SITE = 7

TAXON	REP A	MEAN
CHLOROPHYTA		
CHLOROPHYTA I	27.00	27.00
GROUP MEAN		27.00
CHRYSOPHYTA		
CHRYSIDIASTRUM OCELLATUM	1744.00	1744.00
TABELLARIA FLOCCULOSA	5.00	5.00
ACHNANTHES LANCEOLATA	11.00	11.00
ACHNANTHES MINUTISSIMA	197.00	197.00
NAVICULA ARVENSIS	24.00	24.00
NAVICULA CRYPTOCEPHALA	62.00	62.00
NAVICULA PELLICULOSA	286.00	286.00
NAVICULA VIRIDULA	3.00	3.00
NAVICULA SP 2	11.00	11.00
PINNULARIA GLOBICEPS	3.00	3.00
GOMPHONEMA INTRICATUM	11.00	11.00
CYLINDROTHECA GRACILIS	5.00	5.00
NITZSCHIA APICULATA	3.00	3.00
NITZSCHIA CAPITELLATA	8.00	8.00
NITZSCHIA DENTICULA	8.00	8.00
NITZSCHIA LINEARIS	62.00	62.00
GROUP MEAN		2443.00

APPENDIX F-4-2 (Continued)

SITE = 7

TAXON	REP A	MEAN
CHRYSOPHYTA		
NITZSCHIA PALEA	3.00	3.00
SURIRELLA OVATA	5.00	5.00
GROUP MEAN		8.00
EUGLENOPHYTA		
EUGLENA SPP	3.00	3.00
GROUP MEAN		3.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	92.00	92.00
GROUP MEAN		92.00

APPENDIX F-4-2 (Continued)

SITE = 8

TAXON	REP A	MEAN
CHLOROPHYTA		
SCENEDESMUS QUADRICAUDA	8.00	8.00
CHLOROPHYTA I	14.00	14.00
GROUP MEAN		22.00
CHRYSOPHYTA		
CHRYSIDIASTRUM OCELLATUM	236.00	236.00
MELOSIRA ITALICA	4.00	4.00
STEPHANODISCUS ASTRAEA	1.00	1.00
TABELLARIA FLOCCULOSA	3.00	3.00
FRAGILARIA VAUCHERIAE	1.00	1.00
ACHNANTHES LANCEOLATA	8.00	8.00
ACHNANTHES MINUTISSIMA	12.00	12.00
NAVICULA CRYPTOCEPHALA	1.00	1.00
NAVICULA PELLICULOSA	22.00	22.00
PINNULARIA VIRIDIS	.02	.02
GOMPHONEMA INTRICATUM	1.00	1.00
NITZSCHIA CAPITELLATA	1.00	1.00
SURIRELLA OVALIS	.02	.02
GROUP MEAN		290.04

APPENDIX F-4-2 (Continued)

SITE = B

TAXON	REP A	MEAN
EUGLENOPHYTA		
EUGLENA PROXIMA	1.00	1.00
GROUP MEAN		1.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	32.00	32.00
GROUP MEAN		32.00

APPENDIX F-4-2 (Continued)

SITE = 9

TAXON	REP A	MEAN
CYANOPHYTA		
OSCILLATORIA TENUIS	5.00	5.00
GROUP MEAN		5.00
CHLOROPHYTA		
CLOSTERIUM LEIBLEINII	3.00	3.00
CHLOROPHYTA I	46.00	46.00
GROUP MEAN		49.00
CHRYSOPHYTA		
STEPHANODISCUS TENUIS	3.00	3.00
MERIDION CIRCULARE	11.00	11.00
FRAGILARIA VAUCHERIAE	5.00	5.00
COCCONEIS PEDICULUS	8.00	8.00
ACHNANTHES LANCEOLATA	14.00	14.00
ACHNANTHES MINUTISSIMA	81.00	81.00
NAVICULA ARVENSIS	5.00	5.00
NAVICULA CRYPTOCEPHALA	103.00	103.00
NAVICULA MUTICA	3.00	3.00
NAVICULA PELLICULOSA	127.00	127.00
NAVICULA SP 2	16.00	16.00
GROUP MEAN		376.00

APPENDIX F-4-2 (Continued)

SITE = 9

TAXON	REP A	MEAN
CHRYSOPHYTA		
PINNULARIA BREBISSONII	8.00	8.00
CYMBELLA VENTRICOSA	3.00	3.00
GOMPHONEMA INTRICATUM	16.00	16.00
EPITHEMIA SOREX	5.00	5.00
CYLINDROTHECA GRACILIS	3.00	3.00
NITZSCHIA CAPITELLATA	8.00	8.00
NITZSCHIA DENTICULA	3.00	3.00
NITZSCHIA FRUSTULUM	14.00	14.00
NITZSCHIA LINEARIS	254.00	254.00
NITZSCHIA TRYBLIONELLA	3.00	3.00
SURIRELLA OVATA	30.00	30.00
SURIRELLA OVALIS	8.00	8.00
GROUP MEAN		355.00

APPENDIX F-4-2 (Continued)

SITE = 13

TAXON	REP A	MEAN
CHLOROPHYTA		
CHLOROPHYTA I	7.00	7.00
GROUP MEAN		7.00
CHRYSOPHYTA		
CHRYSIDIASTRUM OCELLATUM	18.00	18.00
MERIDION CIRCULARE	8.00	8.00
FRAGILARIA VAUCHERIAE	3.00	3.00
ACHNANTHES LANCEOLATA	32.00	32.00
ACHNANTHES MINUTISSIMA	14.00	14.00
NAVICULA ARVENSIS	3.00	3.00
NAVICULA CRYPTOCEPHALA	45.00	45.00
NAVICULA PELLICULOSA	32.00	32.00
NAVICULA VIRIDULA	1.00	1.00
NAVICULA SP 2	3.00	3.00
CALONEIS BACILLUM	1.00	1.00
PINNULARIA VIRIDIS	3.00	3.00
GOMPHONEMA INTRICATUM	8.00	8.00
GOMPHONEMA OLIVACEUM	1.00	1.00
NITZSCHIA ACICULARIS	1.00	1.00
NITZSCHIA CAPITELLATA	11.00	11.00
GROUP MEAN		184.00

APPENDIX F-4-2 (Continued)

SITE = 13

TAXON	REP A	MEAN
CHRYSOPHYTA		
NITZSCHIA FRUSTULUM	3.00	3.00
NITZSCHIA LINEARIS	19.00	19.00
NITZSCHIA PALEA	3.00	3.00
SURIRELLA OVATA	20.00	20.00
GROUP MEAN		45.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	14.00	14.00
GROUP MEAN		14.00

APPENDIX F-4-2 (Continued)

SITE = 15

TAXON	REP A	MEAN
CHLOROPHYTA		
ULOTHRIX SPP	.44	.44
CHLOROPHYTA I	14.00	14.00
GROUP MEAN		14.44
CHRYSOPHYTA		
CYCLOTELLA MENEGHINIANA	1.00	1.00
SYNEDRA MINUSCULA	1.00	1.00
ACHNANTHES LANCEOLATA	3.00	3.00
NAVICULA ARVENSIS	1.00	1.00
NAVICULA CRYPTOCEPHALA	27.00	27.00
NAVICULA PELLICULOSA	139.00	139.00
NAVICULA SALINARUM VAR. INTERMEDIA	1.00	1.00
NAVICULA SPP	1.00	1.00
PINNULARIA VIRIDIS	.02	.02
CYMBELLA MICROCEPHALA	1.00	1.00
NITZSCHIA CAPITELLATA	11.00	11.00
NITZSCHIA PALEA	1.00	1.00
GROUP MEAN		187.02

APPENDIX F-4-2 (Continued)

SITE = 15

TAXON	REP A	MEAN
EUGLENOPHYTA		
EUGLENA PROXIMA	1.00	1.00
GROUP MEAN		1.00
CRYPTOPHYTA		
CRYPTOMONAS EROSA	3.00	3.00
GROUP MEAN		3.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	24.00	24.00
GROUP MEAN		24.00

APPENDIX F-4-2 (Continued)

SITE = 17

TAXON	REP A	MEAN
CHLOROPHYTA		
CHLAMYDOMONAS GLOBOSA	3.00	3.00
ULOTHRIX SPP	.30	.30
STIGEOCLONIUM SPP	16.00	16.00
ANKISTRODESMUS CONVOLUTUS	3.00	3.00
CHLOROPHYTA I	27.00	27.00
GROUP MEAN		49.30
CHRYSOPHYTA		
DIATOMA TENUE	3.00	3.00
MERIDION CIRCULARE	5.00	5.00
SYNEDRA AMPHICEPHALA	32.00	32.00
NAVICULA ARVENSIS	5.00	5.00
NAVICULA CRYPTOCEPHALA	19.00	19.00
NAVICULA PELLICULOSA	270.00	270.00
NAVICULA TRIPUNCTATA	3.00	3.00
NAVICULA SP 2	14.00	14.00
GOMPHONEMA INTRICATUM	3.00	3.00
RHOPALODIA GIBBA	3.00	3.00
NITZSCHIA ACICULARIS	5.00	5.00
NITZSCHIA CAPITELLATA	30.00	30.00
GROUP MEAN		392.00

APPENDIX F-4-2 (Continued)

SITE = 17

TAXON	REP A	MEAN
CHRYSOPHYTA		
NITZSCHIA FRUSTULUM	8.00	8.00
NITZSCHIA GRACILIS	5.00	5.00
NITZSCHIA PALEA	8.00	8.00
GROUP MEAN		21.00
EUGLENOPHYTA		
EUGLENA SPP	5.00	5.00
GROUP MEAN		5.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	783.00	783.00
GROUP MEAN		783.00

APPENDIX F-4-2 (Continued)

SITE = 18

TAXON	REP A	MEAN
CYANOPHYTA		
OSCILLATORIA TENUIS	.30	.30
GROUP MEAN		.30
CHLOROPHYTA		
STIGEOCLONIUM SPP	1.04	1.04
CHLOROPHYTA I	138.00	138.00
GROUP MEAN		139.04
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	5.00	5.00
FRAGILARIA VAUCHERIAE	3.00	3.00
ACHNANTHES LANCEOLATA	5.00	5.00
NAVICULA ARVENSIS	3.00	3.00
NAVICULA CRYPTOCEPHALA	24.00	24.00
NAVICULA PELLICULOSA	1007.00	1007.00
NAVICULA VIRIDULA	11.00	11.00
NAVICULA SP 2	22.00	22.00
GOMPHONEMA PARVULUM	3.00	3.00
GOMPHONEMA VENTRICOSUM	3.00	3.00
NITZSCHIA CAPITELLATA	59.00	59.00
GROUP MEAN		1145.00

APPENDIX F-4-2 (Continued)

SITE = 18

TAXON	REP A	MEAN
CHRYSOPHYTA		
NITZSCHIA FRUSTULUM	3.00	3.00
NITZSCHIA PALEA	5.00	5.00
GROUP MEAN		8.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	959.00	959.00
GROUP MEAN		959.00

APPENDIX F-4-2 (Continued)

SITE = 19

TAXON	REP A	MEAN
CYANOPHYTA		
OSCILLATORIA TENUIS	32.00	32.00
GROUP MEAN		32.00
CHLOROPHYTA		
CHLAMYDOMONAS GLOBOSA	5.00	5.00
SCENEDESMUS QUADRICAUDA	32.00	32.00
CHLOROPHYTA I	49.00	49.00
GROUP MEAN		86.00
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	16.00	16.00
FRAGILARIA CONSTRUENS	27.00	27.00
FRAGILARIA CROTONENSIS	27.00	27.00
SYNEDRA AMPHICEPHALA	108.00	108.00
ACHNANTHES MINUTISSIMA	22.00	22.00
GYROSIGMA ACUMINATUM	5.00	5.00
PLEUROSIGMA DELICATULUM	5.00	5.00
NAVICULA ARVENSIS	32.00	32.00
NAVICULA CRYPTOCEPHALA	556.00	556.00
NAVICULA CUSPIDATA	11.00	11.00
GROUP MEAN		809.00

APPENDIX F-4-2 (Continued)

SITE = 19

TAXON	REP A	MEAN
CHRYSOPHYTA		
NITZSCHIA GRACILIS	38.00	38.00
NITZSCHIA HOLSATICA	43.00	43.00
NITZSCHIA PALEA	76.00	76.00
SURIRELLA OVATA	378.00	378.00
SURIRELLA OVALIS	5.00	5.00
GROUP MEAN		540.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	81.00	81.00
GROUP MEAN		81.00

APPENDIX F-4-2 (Continued)

SITE = 19

TAXON	REP A	MEAN
CHRYSOPHYTA		
NAVICULA PELLICULOSA	113.00	113.00
NAVICULA TRIPUNCTATA	16.00	16.00
NAVICULA VIRIDULA	11.00	11.00
NAVICULA SP 1	16.00	16.00
NAVICULA SP 2	702.00	702.00
CALONEIS BACILLUM	27.00	27.00
PINNULARIA BOREALIS	5.00	5.00
PINNULARIA BREBISSONII	65.00	65.00
PINNULARIA GLOBICEPS	49.00	49.00
CYMBELLA AFFINIS	5.00	5.00
CYMBELLA VENTRICOSA	5.00	5.00
AMPHIPRORA ALATA	22.00	22.00
EPITHEMIA ZEBRA	16.00	16.00
RHOPALODIA GIBBA	11.00	11.00
CYLINDROTHECA GRACILIS	49.00	49.00
HANTZSCHIA AMPHIOXYS	5.00	5.00
NITZSCHIA ACICULARIS	5.00	5.00
NITZSCHIA APICULATA	43.00	43.00
NITZSCHIA CAPITELLATA	135.00	135.00
NITZSCHIA FRUSTULUM	275.00	275.00
GROUP MEAN		1575.00

APPENDIX F-4-2 (Continued)

SITE = 20

TAXON	REP A	MEAN
CHLOROPHYTA		
ULOTHRIX SPP	5.74	5.74
CHLOROPHYTA I	324.00	324.00
GROUP MEAN		329.74
CHRYSOPHYTA		
CYCLOTELLA MENEGHINIANA	135.00	135.00
FRAGILARIA VAUCHERIAE	405.00	405.00
SYNEDRA AMPHICEPHALA	2214.00	2214.00
SYNEDRA MINUSCULA	108.00	108.00
SYNEDRA PULCHELLA	297.00	297.00
ACHNANTHES LANCEOLATA	27.00	27.00
NAVICULA CRYPTOCEPHALA	189.00	189.00
NAVICULA PELLICULOSA	486.00	486.00
NAVICULA SALINARUM	81.00	81.00
NAVICULA VIRIDULA	27.00	27.00
PINNULARIA BREBISSONII	27.00	27.00
CYMBELLA AFFINIS	27.00	27.00
AMPHIPRORA ALATA	270.00	270.00
NITZSCHIA APICULATA	54.00	54.00
NITZSCHIA CAPITELLATA	7047.00	7047.00
GROUP MEAN		11394.00

APPENDIX F-4-2 (Continued)

SITE = 20

TAXON	REP A	MEAN
CHRYSOPHYTA		
NITZSCHIA DENTICULA	54.00	54.00
NITZSCHIA FRUSTULUM	108.00	108.00
NITZSCHIA LINEARIS	54.00	54.00
NITZSCHIA PALEA	216.00	216.00
SURIRELLA OVATA	16524.00	16524.00
GROUP MEAN		16956.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	1215.00	1215.00
GROUP MEAN		1215.00

APPENDIX F-4-2 (Continued)

SITE = 21

TAXON	REP A	MEAN
CHLOROPHYTA		
ULOTHRIX SPP	57.74	57.74
CHLOROPHYTA I	162.00	162.00
GROUP MEAN		219.74
CHRYSOPHYTA		
FRAGILARIA CAPUCINA	648.00	648.00
FRAGILARIA CONSTRUENS	54.00	54.00
FRAGILARIA VAUCHERIAE	162.00	162.00
SYNEDRA AMPHICEPHALA	1296.00	1296.00
SYNEDRA MINUSCULA	54.00	54.00
SYNEDRA PULCHELLA	108.00	108.00
GYROSIGMA ACUMINATUM	27.00	27.00
NAVICULA CRYPTOCEPHALA	189.00	189.00
NAVICULA PELLICULOSA	567.00	567.00
NAVICULA SALINARUM	162.00	162.00
GOMPHONEMA INTRICATUM	27.00	27.00
GOMPHONEMA PARVULUM	27.00	27.00
AMPHIPRORA ALATA	81.00	81.00
NITZSCHIA APICULATA	27.00	27.00
NITZSCHIA CAPITELLATA	7938.00	7938.00
GROUP MEAN		11367.00

APPENDIX F-4-2 (Continued)

SITE = 21

TAXON	REP A	MEAN
CHRYSOPHYTA		
NITZSCHIA HUNGARICA	54.00	54.00
NITZSCHIA LINEARIS	54.00	54.00
NITZSCHIA PALEA	162.00	162.00
SURIRELLA OVATA	16308.00	16308.00
SURIRELLA OVALIS	27.00	27.00
GROUP MEAN		16605.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	1566.00	1566.00
GROUP MEAN		1566.00

APPENDIX F-4-2 (Continued)

SITE = 22

TAXON	REP A	MEAN
CHLOROPHYTA		
ULOTHRIX SPP	1.70	1.70
CHLOROPHYTA I	270.00	270.00
GROUP MEAN		271.70
CHRYSOPHYTA		
CYCLOTELLA MENEGHINIANA	108.00	108.00
FRAGILARIA CAPUCINA	594.00	594.00
FRAGILARIA VAUCHERIAE	162.00	162.00
SYNEDRA AMPHICEPHALA	459.00	459.00
SYNEDRA MINUSCULA	216.00	216.00
SYNEDRA PULCHELLA	108.00	108.00
NAVICULA ARVENSIS	81.00	81.00
NAVICULA CRYPTOCEPHALA	54.00	54.00
NAVICULA PELLICULOSA	243.00	243.00
NAVICULA SALINARUM	27.00	27.00
AMPHIPRORA ALATA	135.00	135.00
NITZSCHIA CAPITELLATA	4077.00	4077.00
NITZSCHIA FRUSTULUM	81.00	81.00
NITZSCHIA HOLSATICA	162.00	162.00
NITZSCHIA PALEA	81.00	81.00
GROUP MEAN		6588.00

APPENDIX F-4-2 (Continued)

SITE = 22

TAXON	REP A	MEAN
CHRYSOPHYTA		
SURIRELLA OVATA	10827.00	10827.00
GROUP MEAN		10827.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	2052.00	2052.00
GROUP MEAN		2052.00

APPENDIX F-4-2 (Continued)

SITE = 23

TAXON	REP A	MEAN
CYANOPHYTA		
OSCILLATORIA SPP	.20	.20
GROUP MEAN		.20
CHLOROPHYTA		
STIGEOCLONIUM SPP	1.92	1.92
SCENEDESMUS QUADRICAUDA	22.00	22.00
CHLOROPHYTA I	32.00	32.00
GROUP MEAN		55.92
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	49.00	49.00
FRAGILARIA LEPTOSTAURON	27.00	27.00
FRAGILARIA PINNATA	16.00	16.00
SYNEDRA AMPHICEPHALA	16.00	16.00
COCCONEIS PEDICULUS	32.00	32.00
ACHNANTHES MINUTISSIMA	22.00	22.00
NAVICULA ARVENSIS	5.00	5.00
NAVICULA CRYPTOCEPHALA	151.00	151.00
NAVICULA PELLICULOSA	22.00	22.00
NAVICULA SALINARUM	5.00	5.00
GROUP MEAN		345.00

APPENDIX F-4-2 (Continued)

SITE = 23

TAXON	REP A	MEAN
CHRYSOPHYTA		
NAVICULA SALINARUM VAR. INTERMEDIA	11.00	11.00
NAVICULA TRIPUNCTATA	130.00	130.00
NAVICULA VIRIDULA	529.00	529.00
CYMBELLA AFFINIS	11.00	11.00
CYMBELLA VENTRICOSA	108.00	108.00
GOMPHONEMA INTRICATUM	11.00	11.00
GOMPHONEMA OLIVACEUM	38.00	38.00
GOMPHONEMA VENTRICOSUM	81.00	81.00
EPITHEMIA SOREX	5.00	5.00
NITZSCHIA ACICULARIS	5.00	5.00
NITZSCHIA CAPITELLATA	5.00	5.00
NITZSCHIA DISSIPATA	27.00	27.00
NITZSCHIA FRUSTULUM	11.00	11.00
NITZSCHIA HOLSATICA	5.00	5.00
NITZSCHIA PALEA	5.00	5.00
CYMATOPLEURA SOLEA	.02	.02
SURIRELLA OVATA	5.00	5.00
GROUP MEAN		987.02

APPENDIX F-4-2 (Continued)

SITE = 23

TAXON	REP A	MEAN
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	70.00	70.00
GROUP MEAN		70.00

APPENDIX F-4-2 (Continued)

SITE = 24

TAXON	REP A	MEAN
CYANOPHYTA		
OSCILLATORIA SPP	22.00	22.00
GROUP MEAN		22.00
CHLOROPHYTA		
ULOTHRIX SPP	.28	.28
STIGEOCLONIUM SPP	.40	.40
CHLOROPHYTA I	32.00	32.00
GROUP MEAN		32.68
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	22.00	22.00
DIATOMA VULGARE	11.00	11.00
FRAGILARIA CAPUCINA	292.00	292.00
FRAGILARIA LEPTOSTAURON	76.00	76.00
FRAGILARIA PINNATA	97.00	97.00
FRAGILARIA VAUCHERIAE	54.00	54.00
COCCONEIS PEDICULUS	11.00	11.00
ACHNANTHES MINUTISSIMA	54.00	54.00
NAVICULA CRYPTOCEPHALA	140.00	140.00
NAVICULA SALINARUM VAR. INTERMEDIA	11.00	11.00
GROUP MEAN		768.00

APPENDIX F-4-2 (Continued)

SITE = 24

TAXON	REP A	MEAN
CHRYSOPHYTA		
NAVICULA TRIPUNCTATA	54.00	54.00
NAVICULA VIRIDULA	583.00	583.00
CYMBELLA AFFINIS	32.00	32.00
CYMBELLA VENTRICOSA	22.00	22.00
GOMPHONEMA OLIVACEUM	173.00	173.00
GOMPHONEMA VENTRICOSUM	65.00	65.00
EPITHEMIA SOREX	11.00	11.00
NITZSCHIA ACICULARIS	11.00	11.00
NITZSCHIA CAPITELLATA	11.00	11.00
NITZSCHIA DISSIPATA	108.00	108.00
GROUP MEAN		1070.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	162.00	162.00
GROUP MEAN		162.00

APPENDIX F-4-2 (Continued)

SITE = 25

TAXON	REP A	MEAN
CHLOROPHYTA		
ULOTHRIX SPP	11.00	11.00
STIGEOCLONIUM SPP	1.30	1.30
CHLOROPHYTA I	43.00	43.00
GROUP MEAN		55.30
CHRYSOPHYTA		
MELOSIRA DISTANS	22.00	22.00
THALASSIOSIRA FLUVIATILIS	22.00	22.00
FRAGILARIA VAUCHERIAE	11.00	11.00
SYNEDRA AMPHICEPHALA	11.00	11.00
SYNEDRA ULNA	11.00	11.00
ACHNANTHES LANCEOLATA	11.00	11.00
ACHNANTHES MINUTISSIMA	22.00	22.00
NAVICULA CRYPTOCEPHALA	76.00	76.00
NAVICULA PELLICULOSA	22.00	22.00
NAVICULA TRIPUNCTATA	54.00	54.00
NAVICULA VIRIDULA	518.00	518.00
CYMBELLA VENTRICOSA	54.00	54.00
GOMPHONEMA OLIVACEUM	97.00	97.00
GOMPHONEMA VENTRICOSUM	11.00	11.00
GROUP MEAN		942.00

APPENDIX F-4-2 (Continued)

SITE = 25

TAXON	REP A	MEAN
CHRYSOPHYTA		
EPITHEMIA SOREX	32.00	32.00
NITZSCHIA CAPITELLATA	22.00	22.00
NITZSCHIA DISSIPATA	97.00	97.00
SURIRELLA OVATA	11.00	11.00
GROUP MEAN		162.00
CRYPTOPHYTA		
CRYPTOMONAS EROSA	11.00	11.00
GROUP MEAN		11.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	86.00	86.00
GROUP MEAN		86.00

APPENDIX F-4-2 (Continued)

SITE = 26

TAXON	REP A	MEAN
CYANOPHYTA		
LYNGBYA SPP	22.00	22.00
OSCILLATORIA TENUIS	16.00	16.00
GROUP MEAN		38.00
CHLOROPHYTA		
STIGEOCLONIUM SPP	1.16	1.16
CHLOROPHYTA I	54.00	54.00
GROUP MEAN		55.16
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	11.00	11.00
DIATOMA HIEMALE	5.00	5.00
DIATOMA VULGARE	16.00	16.00
FRAGILARIA LEPTOSTAURON	16.00	16.00
ACHNANTHES MINUTISSIMA	11.00	11.00
NAVICULA ARVENSIS	5.00	5.00
NAVICULA CRYPTOCEPHALA	135.00	135.00
NAVICULA CUSPIDATA	.02	.02
NAVICULA PELLICULOSA	22.00	22.00
NAVICULA SALINARUM VAR. INTERMEDIA	5.00	5.00
GROUP MEAN		226.02

APPENDIX F-4-2 (Continued)

SITE = 26

TAXON	REP A	MEAN
CHRYSOPHYTA		
NAVICULA TRIPUNCTATA	65.00	65.00
NAVICULA VIRIDULA	583.00	583.00
CYMBELLA AFFINIS	11.00	11.00
CYMBELLA SINUATA	5.00	5.00
CYMBELLA VENTRICOSA	49.00	49.00
GOMPHONEMA OLIVACEUM	135.00	135.00
EPITHEMIA SOREX	11.00	11.00
CYLINDROTHECA GRACILIS	5.00	5.00
NITZSCHIA ACICULARIS	5.00	5.00
NITZSCHIA CAPITELLATA	22.00	22.00
NITZSCHIA DISSIPATA	76.00	76.00
NITZSCHIA LINEARIS	5.00	5.00
CYMATOPLEURA SOLEA	.04	.04
SURIRELLA OVATA	16.00	16.00
GROUP MEAN		988.04
CRYPTOPHYTA		
CRYPTOMONAS EROSA	22.00	22.00
GROUP MEAN		22.00

APPENDIX F-4-2 (Continued)

SITE = 26

TAXON	REP A	MEAN
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	65.00	65.00
GROUP MEAN		65.00

APPENDIX F-4-2 (Continued)

SITE = 27

TAXON	REP A	MEAN
CHLOROPHYTA		
STIGEOCLONIUM SPP	.34	.34
CLADOPHORA SPP	.42	.42
CHLOROPHYTA I	27.00	27.00
GROUP MEAN		27.76
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	22.00	22.00
STEPHANODISCUS TENUIS	5.00	5.00
DIATOMA VULGARE	11.00	11.00
FRAGILARIA LEPTOSTAURON	27.00	27.00
FRAGILARIA PINNATA	65.00	65.00
HANNAEA ARCUS	5.00	5.00
SYNEDRA ULNA	5.00	5.00
COCCONEIS PEDICULUS	11.00	11.00
ACHNANTHES LANCEOLATA	21.00	21.00
DIPLONEIS ELLIPTICA	5.00	5.00
NAVICULA CRYPTOCEPHALA	108.00	108.00
NAVICULA SALINARUM VAR. INTERMEDIA	16.00	16.00
NAVICULA TRIPUNCTATA	97.00	97.00
NAVICULA VIRIDULA	529.00	529.00
GROUP MEAN		927.00

APPENDIX F-4-2 (Continued)

SITE = 27

TAXON	REP A	MEAN
CHRYSOPHYTA		
CALONEIS AMPHISBAENA	5.00	5.00
AMPHORA OVALIS VAR. PEDICULUS	5.00	5.00
CYMBELLA AFFINIS	5.00	5.00
CYMBELLA VENTRICOSA	54.00	54.00
GOMPHONEMA INTRICATUM	11.00	11.00
GOMPHONEMA OLIVACEUM	167.00	167.00
GOMPHONEMA VENTRICOSUM	5.00	5.00
EPITHEMIA SOREX	22.00	22.00
NITZSCHIA CAPITELLATA	5.00	5.00
NITZSCHIA DISSIPATA	54.00	54.00
NITZSCHIA FRUSTULUM	5.00	5.00
NITZSCHIA PALEA	5.00	5.00
CYMATOPLEURA SOLEA	.02	.02
GROUP MEAN		343.02
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	38.00	38.00
GROUP MEAN		38.00

APPENDIX F-4-2 (Continued)

SITE = 28

TAXON	REP A	MEAN
CYANOPHYTA		
ANABAENA SPP	5.00	5.00
GROUP MEAN		5.00
CHLOROPHYTA		
ULOTHRIX SPP	.20	.20
CHLOROPHYTA I	38.00	38.00
GROUP MEAN		38.20
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	27.00	27.00
CYCLOTELLA MENEGHINIANA	32.00	32.00
STEPHANODISCUS TENUIS	11.00	11.00
DIATOMA VULGARE	54.00	54.00
FRAGILARIA CONSTRUENS	27.00	27.00
FRAGILARIA VAUCHERIAE	70.00	70.00
SYNEDRA AMPHICEPHALA	92.00	92.00
SYNEDRA PULCHELLA	5.00	5.00
COCCONEIS PEDICULUS	5.00	5.00
ACHNANTHES LANCEOLATA	16.00	16.00
ACHNANTHES MINUTISSIMA	11.00	11.00
GROUP MEAN		350.00

APPENDIX F-4-2 (Continued)

SITE = 28

TAXON	REP A	MEAN
CHRYSOPHYTA		
NAVICULA ARVENSIS	5.00	5.00
NAVICULA CRYPTOCEPHALA	119.00	119.00
NAVICULA PELLICULOSA	22.00	22.00
NAVICULA SALINARUM VAR. INTERMEDIA	16.00	16.00
NAVICULA TRIPUNCTATA	81.00	81.00
NAVICULA VIRIDULA	470.00	470.00
AMPHORA OVALIS VAR. PEDICULUS	11.00	11.00
CYMBELLA AFFINIS	5.00	5.00
CYMBELLA SINUATA	5.00	5.00
CYMBELLA VENTRICOSA	32.00	32.00
GOMPHONEMA INTRICATUM	16.00	16.00
GOMPHONEMA OLIVACEUM	167.00	167.00
AMPHIPRORA ALATA	11.00	11.00
EPITHEMIA SOREX	16.00	16.00
NITZSCHIA ACICULARIS	11.00	11.00
NITZSCHIA APICULATA	5.00	5.00
NITZSCHIA CAPITELLATA	913.00	913.00
NITZSCHIA DISSIPATA	76.00	76.00
NITZSCHIA FRUSTULUM	43.00	43.00
NITZSCHIA HOLSATICA	49.00	49.00
GROUP MEAN		2073.00

APPENDIX F-4-2 (Continued)

SITE = 20

TAXON	REP A	MEAN
CHRYSOPHYTA		
NITZSCHIA PALEA	32.00	32.00
NITZSCHIA VERMICULARIS	.02	.02
SURIRELLA OVATA	1674.00	1674.00
SURIRELLA OVALIS	5.00	5.00
GROUP MEAN		1711.02
EUGLENOPHYTA		
EUGLENA SPP	5.00	5.00
GROUP MEAN		5.00
CRYPTOPHYTA		
CRYPTOMONAS EROSA	32.00	32.00
GROUP MEAN		32.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	227.00	227.00
GROUP MEAN		227.00

APPENDIX F-4-2 (Continued)

SITE = 29

TAXON	REP A	MEAN
CYANOPHYTA		
OSCILLATORIA TENUIS	11.00	11.00
GROUP MEAN		11.00
CHLOROPHYTA		
STIGEOCLONIUM SPP	16.00	16.00
CLADOPHORA SPP	.12	.12
CHLOROPHYTA I	49.00	49.00
GROUP MEAN		65.12
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	38.00	38.00
DIATOMA VULGARE	59.00	59.00
FRAGILARIA PINNATA	27.00	27.00
FRAGILARIA VAUCHERIAE	16.00	16.00
SYNEDRA AMPHICEPHALA	22.00	22.00
ACHNANTHES LANCEOLATA	11.00	11.00
NAVICULA CRYPTOCEPHALA	70.00	70.00
NAVICULA PELLICULOSA	16.00	16.00
NAVICULA SALINARUM VAR. INTERMEDIA	22.00	22.00
NAVICULA TRIPUNCTATA	27.00	27.00
GROUP MEAN		308.00

APPENDIX F-4-2 (Continued)

SITE = 29

TAXON	REP A	MEAN
CHRYSOPHYTA		
NAVICULA VIRIDULA	351.00	351.00
AMPHORA OVALIS VAR. PEDICULUS	5.00	5.00
CYMBELLA AFFINIS	5.00	5.00
CYMBELLA VENTRICOSA	54.00	54.00
GOMPHONEMA OLIVACEUM	113.00	113.00
GOMPHONEMA VENTRICOSUM	11.00	11.00
AMPHIPRORA ALATA	5.00	5.00
EPITHEMIA SOREX	22.00	22.00
NITZSCHIA CAPITELLATA	38.00	38.00
NITZSCHIA DISSIPATA	70.00	70.00
NITZSCHIA FRUSTULUM	16.00	16.00
CYMATOPLEURA SOLEA	5.00	5.00
SURIRELLA OVATA	22.00	22.00
GROUP MEAN		717.00
EUGLENOPHYTA		
EUGLENA PROXIMA	11.00	11.00
GROUP MEAN		11.00

APPENDIX F-4-2 (Continued)

SITE = 29

TAXON	REP A	MEAN
CRYPTOPHYTA		
CRYPTOMONAS EROSA	11.00	11.00
GROUP MEAN		11.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	81.00	81.00
GROUP MEAN		81.00

APPENDIX F-4-2 (Continued)

SITE = 30

TAXON	REP A	MEAN
CYANOPHYTA		
ANABAENA SPP	32.00	32.00
GROUP MEAN		32.00
CHLOROPHYTA		
CHLOROPHYTA I	32.00	32.00
GROUP MEAN		32.00
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	5.00	5.00
DIATOMA VULGARE	5.00	5.00
FRAGILARIA CONSTRUENS	32.00	32.00
FRAGILARIA LEPTOSTAURON	5.00	5.00
FRAGILARIA PINNATA	32.00	32.00
FRAGILARIA VAUCHERIAE	5.00	5.00
ACHNANTHES MINUTISSIMA	11.00	11.00
RHOICOSPHENIA CURVATA	5.00	5.00
NAVICULA CRYPTOCEPHALA	65.00	65.00
NAVICULA PELLICULOSA	16.00	16.00
NAVICULA SALINARUM VAR. INTERMEDIA	11.00	11.00
NAVICULA TRIPUNCTATA	59.00	59.00
GROUP MEAN		251.00

APPENDIX F-4-2 (Continued)

SITE = 30

TAXON	REP A	MEAN
CHRYSOPHYTA		
NAVICULA VIRIDULA	443.00	443.00
NAVICULA SP 2	5.00	5.00
CALONEIS AMPHISBAENA	.10	.10
CYMBELLA AFFINIS	32.00	32.00
CYMBELLA VENTRICOSA	59.00	59.00
GOMPHONEMA OLIVACEUM	146.00	146.00
GOMPHONEMA VENTRICOSUM	16.00	16.00
EPITHEMIA SOREX	38.00	38.00
NITZSCHIA CAPITELLATA	5.00	5.00
NITZSCHIA DISSIPATA	65.00	65.00
SURIRELLA OVATA	16.00	16.00
GROUP MEAN		825.10
EUGLENOPHYTA		
EUGLENA SPP	5.00	5.00
GROUP MEAN		5.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	54.00	54.00
GROUP MEAN		54.00

APPENDIX F-4-2 (Continued)

SITE = 31

TAXON	REP A	MEAN
CYANOPHYTA		
LYNGBYA SPP	16.00	16.00
OSCILLATORIA TENUIS	5.00	5.00
ANABAENA SPP	5.00	5.00
GROUP MEAN		26.00
CHLOROPHYTA		
ULOTHRIX SPP	.22	.22
STIGEOCLONIUM SPP	.16	.16
CLADOPHORA SPP	.32	.32
CHLOROPHYTA I	43.00	43.00
GROUP MEAN		43.70
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	54.00	54.00
STEPHANODISCUS TENUIS	11.00	11.00
DIATOMA TENUE	5.00	5.00
DIATOMA VULGARE	108.00	108.00
FRAGILARIA LEPTOSTAURON	5.00	5.00
FRAGILARIA VAUCHERIAE	54.00	54.00
HANNAEA ARCUS	5.00	5.00
GROUP MEAN		242.00

APPENDIX F-4-2 (Continued)

SITE = 31

TAXON	REP A	MEAN
CHRYSOPHYTA		
SYNEDRA PULCHELLA	11.00	11.00
COCCONEIS PEDICULUS	11.00	11.00
ACHNANTHES MINUTISSIMA	11.00	11.00
NAVICULA CRYPTOCEPHALA	108.00	108.00
NAVICULA PELLICULOSA	65.00	65.00
NAVICULA SALINARUM VAR. INTERMEDIA	5.00	5.00
NAVICULA TRIPUNCTATA	178.00	178.00
NAVICULA VIRIDULA	988.00	988.00
AMPHORA OVALIS VAR. PEDICULUS	11.00	11.00
CYMBELLA AFFINIS	16.00	16.00
CYMBELLA SINUATA	5.00	5.00
CYMBELLA VENTRICOSA	81.00	81.00
DIDYMOSPHENIA GEMINATA	.02	.02
GOMPHONEMA OLIVACEUM	340.00	340.00
GOMPHONEMA VENTRICOSUM	70.00	70.00
EPITHEMIA SOREX	27.00	27.00
CYLINDROTHECA GRACILIS	5.00	5.00
NITZSCHIA ACICULARIS	16.00	16.00
NITZSCHIA CAPITELLATA	43.00	43.00
NITZSCHIA DISSIPATA	70.00	70.00
GROUP MEAN		2061.02

APPENDIX F-4-2 (Continued)

SITE = 31

TAXON	REP A	MEAN
CHRYSOPHYTA		
NITZSCHIA FRUSTULUM	70.00	70.00
NITZSCHIA LINEARIS	5.00	5.00
NITZSCHIA VERMICULARIS	.02	.02
CYMATOPLEURA SOLEA	.04	.04
SURIRELLA OVATA	43.00	43.00
GROUP MEAN		118.06
CRYPTOPHYTA		
CRYPTOMONAS EROSA	27.00	27.00
GROUP MEAN		27.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	92.00	92.00
GROUP MEAN		92.00

APPENDIX F-4-2 (Continued)

SITE = 32

TAXON	REP A	MEAN
CYANOPHYTA		
OSCILLATORIA SPP	5.00	5.00
CALOTHRIX SPP	5.00	5.00
GROUP MEAN		10.00
CHLOROPHYTA		
ULOTHRIX SPP	.50	.50
STIGEOCLONIUM SPP	16.00	16.00
CHLOROPHYTA I	38.00	38.00
GROUP MEAN		54.50
CHRYSOPHYTA		
STEPHANODISCUS TENUIS	11.00	11.00
DIATOMA VULGARE	70.00	70.00
FRAGILARIA CONSTRUENS	32.00	32.00
FRAGILARIA LEPTOSTAURON	22.00	22.00
FRAGILARIA PINNATA	103.00	103.00
FRAGILARIA VAUCHERIAE	43.00	43.00
HANNAEA ARCUS	11.00	11.00
SYNEDRA ULNA	11.00	11.00
COCCONEIS PEDICULUS	16.00	16.00
GROUP MEAN		319.00

APPENDIX F-4-2 (Continued)

SITE = 32

TAXON	REP A	MEAN
CHRYSOPHYTA		
ACHNANTHES MINUTISSIMA	11.00	11.00
NAVICULA ARVENSIS	5.00	5.00
NAVICULA CRYPTOCEPHALA	135.00	135.00
NAVICULA PELLICULOSA	59.00	59.00
NAVICULA SALINARUM VAR. INTERMEDIA	11.00	11.00
NAVICULA TRIPUNCTATA	97.00	97.00
NAVICULA VIRIDULA	497.00	497.00
CYMBELLA AFFINIS	22.00	22.00
CYMBELLA VENTRICOSA	92.00	92.00
GOMPHONEMA INTRICATUM	22.00	22.00
GOMPHONEMA OLIVACEUM	319.00	319.00
GOMPHONEMA VENTRICOSUM	16.00	16.00
EPITHEMIA SOREX	16.00	16.00
NITZSCHIA APICULATA	5.00	5.00
NITZSCHIA CAPITELLATA	32.00	32.00
NITZSCHIA DISSIPATA	103.00	103.00
NITZSCHIA GRACILIS	11.00	11.00
NITZSCHIA PALEA	16.00	16.00
NITZSCHIA VERMICULARIS	.02	.02
CYMATOPLEURA SOLEA	5.00	5.00
GROUP MEAN		1474.02

APPENDIX F-4-2 (Continued)

SITE = 32

TAXON	REP A	MEAN
CHRYSOPHYTA		
SURIRELLA OVATA	27.00	27.00
GROUP MEAN		27.00
CRYPTOPHYTA		
CRYPTOMONAS EROSA	11.00	11.00
GROUP MEAN		11.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	104.00	104.00
GROUP MEAN		104.00

APPENDIX F-4-2 (Continued)

SITE = 33

TAXON	REP A	MEAN
CYANOPHYTA		
ANABAENA SPP	5.00	5.00
GROUP MEAN		5.00
CHLOROPHYTA		
STIGEOCLONIUM SPP	.36	.36
CHLOROPHYTA I	76.00	76.00
GROUP MEAN		76.36
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	32.00	32.00
CYCLOTELLA MENEGHINIANA	5.00	5.00
STEPHANODISCUS TENUIS	11.00	11.00
DIATOMA VULGARE	38.00	38.00
FRAGILARIA CONSTRUENS	54.00	54.00
FRAGILARIA LEPTOSTAURON	59.00	59.00
FRAGILARIA PINNATA	49.00	49.00
FRAGILARIA VAUCHERIAE	22.00	22.00
HANNAEA ARCUS	11.00	11.00
SYNEDRA ULNA	5.00	5.00
COCCONEIS PEDICULUS	5.00	5.00
GROUP MEAN		291.00

APPENDIX F-4-2 (Continued)

SITE = 33

TAXON	REP A	MEAN
CHRYSOPHYTA		
ACHNANTHES LANCEOLATA	5.00	5.00
ACHNANTHES MINUTISSIMA	27.00	27.00
NAVICULA CRYPTOCEPHALA	162.00	162.00
NAVICULA PELLICULOSA	27.00	27.00
NAVICULA SALINARUM VAR. *INTERMEDIA*	5.00	5.00
NAVICULA TRIPUNCTATA	65.00	65.00
NAVICULA VIRIDULA	874.00	874.00
NAVICULA SP 2	5.00	5.00
PINNULARIA GLOBICEPS	5.00	5.00
AMPHORA OVALIS VAR. *PEDICULUS*	22.00	22.00
CYMBELLA AFFINIS	27.00	27.00
CYMBELLA SINUATA	5.00	5.00
CYMBELLA VENTRICOSA	86.00	86.00
GOMPHONEMA INTRICATUM	27.00	27.00
GOMPHONEMA OLIVACEUM	259.00	259.00
EPITHEMIA SOREX	22.00	22.00
NITZSCHIA CAPITELLATA	22.00	22.00
NITZSCHIA DISSIPATA	65.00	65.00
NITZSCHIA FRUSTULUM	5.00	5.00
NITZSCHIA HOLSATICA	22.00	22.00
GROUP MEAN		1737.00

APPENDIX F-4-2 (Continued)

SITE = 33

TAXON	REP A	MEAN
CHRYSOPHYTA		
NITZSCHIA LINEARIS	11.00	11.00
NITZSCHIA PALEA	16.00	16.00
CYMATOPLEURA SOLEA	.04	.04
SURIRELLA ANGUSTATA	5.00	5.00
SURIRELLA OVATA	32.00	32.00
GROUP MEAN		64.04
EUGLENOPHYTA		
EUGLENA SPP	11.00	11.00
GROUP MEAN		11.00
CRYPTOPHYTA		
CRYPTOMONAS EROSA	22.00	22.00
GROUP MEAN		22.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	103.00	103.00
GROUP MEAN		103.00

APPENDIX F-4-2 (Continued)

SITE = 34

TAXON	REP A	MEAN
CHLOROPHYTA		
STIGEOCLONIUM SPP	.14	.14
CLADOPHORA SPP	.40	.40
CHLOROPHYTA I	32.00	32.00
GROUP MEAN		32.54
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	16.00	16.00
STEPHANODISCUS TENUIS	5.00	5.00
DIATOMA VULGARE	16.00	16.00
FRAGILARIA CONSTRUENS	81.00	81.00
FRAGILARIA LEPTOSTAURON	5.00	5.00
FRAGILARIA PINNATA	16.00	16.00
FRAGILARIA VAUCHERIAE	38.00	38.00
HANNAEA ARCUS	5.00	5.00
COCCONEIS PEDICULUS	5.00	5.00
NAVICULA CRYPTOCEPHALA	49.00	49.00
NAVICULA PELLICULOSA	38.00	38.00
NAVICULA SALINARUM VAR. INTERMEDIA	5.00	5.00
NAVICULA TRIPUNCTATA	43.00	43.00
NAVICULA VIRIDULA	292.00	292.00
GROUP MEAN		614.00

APPENDIX F-4-2 (Continued)

SITE = 34

TAXON	REP A	MEAN
CHRYSOPHYTA		
CYMBELLA AFFINIS	5.00	5.00
CYMBELLA VENTRICOSA	49.00	49.00
GOMPHONEMA OLIVACEUM	108.00	108.00
GOMPHONEMA VENTRICOSUM	11.00	11.00
EPITHEMIA SOREX	16.00	16.00
NITZSCHIA CAPITELLATA	5.00	5.00
NITZSCHIA DISSIPATA	65.00	65.00
NITZSCHIA HOLSATICA	5.00	5.00
NITZSCHIA PALEA	11.00	11.00
CYMATOPLEURA SOLEA	.02	.02
SURIRELLA OVATA	32.00	32.00
GROUP MEAN		307.02
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	81.00	81.00
GROUP MEAN		81.00

APPENDIX F-4-2 (Continued)

SITE = 35

TAXON	REP A	MEAN
CHLOROPHYTA		
ULOTHRIX SPP	.16	.16
CHLOROPHYTA I	38.00	38.00
GROUP MEAN		38.16
CHRYSOPHYTA		
THALASSIOSIRA FLUVIATILIS	54.00	54.00
STEPHANODISCUS TENUIS	5.00	5.00
DIATOMA VULGARE	27.00	27.00
MERIDION CIRCULARE	5.00	5.00
FRAGILARIA CONSTRUENS	124.00	124.00
FRAGILARIA LEPTOSTAURON	49.00	49.00
FRAGILARIA VAUCHERIAE	54.00	54.00
HANNAEA ARCUS	11.00	11.00
COCCONEIS PEDICULUS	38.00	38.00
ACHNANTHES MINUTISSIMA	59.00	59.00
GYROSIGMA ACUMINATUM	11.00	11.00
STAURONEIS PHOENICENTERON	.02	.02
NAVICULA CRYPTOCEPHALA	54.00	54.00
NAVICULA PELLICULOSA	59.00	59.00
NAVICULA SALINARUM VAR. INTERMEDIA	5.00	5.00
GROUP MEAN		555.02

APPENDIX F-4-2 (Continued)

SITE = 35

TAXON	REP A	MEAN
CHRYSOPHYTA		
NAVICULA TRIPUNCTATA	43.00	43.00
NAVICULA VIRIDULA	394.00	394.00
CALONEIS AMPHISBAENA	.04	.04
AMPHORA OVALIS VAR. PEDICULUS	11.00	11.00
CYMBELLA AFFINIS	27.00	27.00
CYMBELLA MEXICANA	.06	.06
CYMBELLA SINUATA	11.00	11.00
CYMBELLA VENTRICOSA	108.00	108.00
DIDYMOSPHENIA GEMINATA	.12	.12
GOMPHONEMA INTRICATUM	5.00	5.00
GOMPHONEMA OLIVACEUM	246.00	246.00
EPITHEMIA SOREX	11.00	11.00
NITZSCHIA ACICULARIS	5.00	5.00
NITZSCHIA DISSIPATA	59.00	59.00
NITZSCHIA FRUSTULUM	32.00	32.00
NITZSCHIA GRACILIS	5.00	5.00
NITZSCHIA HOLSATICA	5.00	5.00
NITZSCHIA PALEA	16.00	16.00
SURIRELLA OVATA	11.00	11.00
GROUP MEAN		989.22

APPENDIX F-4-2 (Continued)

SITE = 35

TAXON	REP A	MEAN
EUGLENOPHYTA		
EUGLENA SPP	5.00	5.00
GROUP MEAN		5.00
CRYPTOPHYTA		
CRYPTOMONAS EROSA	5.00	5.00
GROUP MEAN		5.00
MICROFLAGELLATES		
FLAGELLATE UNIDENTIFIED	140.00	140.00
GROUP MEAN		140.00

2.4.3 Zooplankton

A list of zooplankton taxa observed in samples collected during the November - December 1975 sampling is presented in Appendix F-5-1. Quantitative zooplankton data from November - December 1975 are presented in Appendix F-5-2.

Protozoa of the genus *Centropyxis* dominated the zooplankton of all stations in November - December. The rotifer fauna was dominated by bdelloid species at the spring brook stations, by *Notholca* species at Station 14, and the lower Yellow Creek stations, and monogonont rotifers in the White River. The Crustacea fauna was scarce in November with only *Bryocamptus hiemalis* common at the spring brook stations and *Eucyclops agilis* found in the Yellow Creek stations.

Zooplankton taxa observed in samples collected during April 1976 are listed in Appendix F-6-1, whereas quantitative data from that period appear in Appendix F-6-2.

Centropyxis species again dominated the Protozoa fauna at the headwater and tract stations in April 1976. However, sessile ciliates, i.e., *Epistylis* and *Vorticella* species occurred in high densities at Station 14 and also the White River. Bdelloid rotifers were the most abundant component of the rotifer fauna at most stations other than those in the White River. At Station 14, however, high densities of *Notholca* species and several others loricated monogonont rotifers and high counts of bdelloids were found. The rotifer fauna of the White River was characterized by a high diversity of monogonont rotifers, all of which had occurred previously in this study. Few Crustacea were found in April; only *Bryocamptus hiemalis* and ostracods abundant and then only at the spring brook stations.

In general, zooplankton densities indicate that zooplankton play a lesser role as secondary consumers in the aquatic habitats on or near Tract C-a than do benthic invertebrates.

2.4.3 - Zooplankton Data

APPENDIX F-5-1

ZOOPLANKTON TAXA OBSERVED DURING
RBOSP AQUATIC BASELINE STUDIES
NOVEMBER - DECEMBER 1975

APPENDIX F-5-1

ZOOPLANKTON TAXA OBSERVED DURING
RBOSP AQUATIC BASELINE STUDIES, NOVEMBER - DECEMBER 1975.

PROTOZOA

- CENTROPYXIS ACULEATA
- CENTROPYXIS ARCELLOIDES
- CENTROPYXIS CONSTRICTA
- CENTROPYXIS ECORNIS
- CHILODONELLA SPECIES
- CILIATES UNIDENTIFIED
- CYPHODERIA AMPULLA
- DIFFLUGIA ACUMINATA
- DIFFLUGIA GRAMEN
- DIFFLUGIA LEBES
- DIFFLUGIA LOBOSTOMA
- DIFFLUGIA PENARDI
- DIFFLUGIA SPECIES
- EPISTYLIS SPECIES
- PARAMECIUM SPECIES
- RHABDOSTYLA SPECIES
- VORTICELLA SPECIES

ROTIFER

- BDELLOIDEA SPECIES
- CEPHALODELLA CATELLINA
- CEPHALODELLA FORFICULA

RBOSP PROGRESS

APPENDIX F-5-1 (Continued)

```
ROTIFER

     CEPHALODELLA SPECIES
     ------------ -------
     COLURELLA ADRIATICA
     --------- ---------
     EUCHLANIS DILATATA
     --------- --------
     GASTROPUS SPECIES
     --------- -------
     KERATELLA COCHLEARIS
     --------- ----------
     LECANE FLEXILIS
     ------ --------
     LECANE LUNA
     ------ ----
     LEPADELLA OVALIS
     --------- ------
     LEPADELLA PATELLA
     --------- -------
     MONOGONONTA SPECIES
     ----------- -------
     MONOSTYLA BULLA
     --------- -----
     MONOSTYLA CLOSTEROCERCA
     --------- -------------
     MONOSTYLA LUNARIS
     --------- -------
     NOTHOLCA ACUMINATA
     -------- ---------
     NOTHOLCA SQUAMULA
     -------- --------
     POLYARTHRA VULGARIS
     ---------- --------
     TRICHOTRIA POCILLUM
     ---------- --------

TARDIGRADA

     MACROBIOTUS SPECIES
     ----------- -------

CLADOCERA

     ALONA CIRCUMFIMBRIATA
     ----- ---------------
     CHYDORUS SPHAERICUS
     -------- ----------
     DAPHNIA SPECIES
     ------- -------
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APPENDIX F-5-1 (Continued)

CLADOCERA

- *PLEUROXUS ADUNCUS*
- *SIMOCEPHALUS VETULUS*

OSTRACODA

- *OSTRACODA SPECIES*

COPEPODA (CYCLOPOIDA)

- *CYCLOPOID COPEPODITES*
- *CYCLOPS VERNALIS*
- *EUCYCLOPS AGILIS*
- *EUCYCLOPS SPERATUS*

COPEPODA (HARPACTICOIDA)

- *BRYOCAMPTUS HIEMALIS*
- *BRYOCAMPTUS HIEMALIS (COPEPODITES)* VAR. %
- *ELAPHOIDELLA SUBGRACILIS*
- *HARPACTICOID SPECIES*

COPEPODA (GENERAL)

- *NAUPLII*

AMPHIPODA

- *HYALELLA AZTECA*

APPENDIX F-5-2

DENSITIES OF ZOOPLANKTON OBSERVED DURING RBOSP AQUATIC BASELINE STUDIES NOVEMBER - DECEMBER 1975

APPENDIX F-5-2

DENSITIES OF ZOOPLANKTON OBSERVED DURING RBOSP AQUATIC BASELINE STUDIES, NOVEMBER - DECEMBER 1975.[1]

(Data are expressed as organisms/m^3)

Site = 1

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	200.00		100.00
CENTROPYXIS CONSTRICTA	800.00	400.00	600.00
EPISTYLIS SPECIES		1800.00	900.00
GROUP MEAN			1600.00
ROTIFER			
BDELLOIDEA SPECIES	400.00	400.00	400.00
MONOGONONTA SPECIES	200.00		100.00
TRICHOTRIA POCILLUM	200.00		100.00
GROUP MEAN			600.00
CLADOCERA			
DAPHNIA SPECIES		10.00	5.00
GROUP MEAN			5.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	70.00	80.00	75.00
BRYOCAMPTUS HIEMALIS (COPEPODITES)	10.00	20.00	15.00
GROUP MEAN			90.00

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[1] Stations 1, 6, 10 - 12, and 16 were dry or inaccessible at the time of sampling.

APPENDIX F-5-2 (Continued)

SITE = 1

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII	400.00	600.00	500.00
GROUP MEAN			500.00

APPENDIX F-5-2 (Continued)

SITE = 2

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS CONSTRICTA	200.00	200.00	200.00
CENTROPYXIS ECORNIS	200.00		100.00
CHILODONELLA SPECIES	400.00	400.00	400.00
CILIATES UNIDENTIFIED	200.00	600.00	400.00
CYPHODERIA AMPULLA	400.00		200.00
DIFFLUGIA GRAMEN	200.00		100.00
EPISTYLIS SPECIES		3600.00	1800.00
VORTICELLA SPECIES	400.00	400.00	400.00
GROUP MEAN			3600.00
ROTIFER			
BDELLOIDEA SPECIES	400.00	1200.00	800.00
MONOGONONTA SPECIES	200.00	200.00	200.00
GROUP MEAN			1000.00
TARDIGRADA			
MACROBIOTUS SPECIES		200.00	100.00
GROUP MEAN			100.00

APPENDIX F-5-2 (Continued)

SITE = 2

TAXON	REP A	REP B	MEAN
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	30.00	250.00	140.00
BRYOCAMPTUS HIEMALIS (COPEPODITES)		60.00	30.00
GROUP MEAN			170.00
COPEPODA (GENERAL)			
NAUPLII	1000.00	4000.00	2500.00
GROUP MEAN			2500.00

APPENDIX F-5-2 (Continued)

SITE = 3

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	400.00		200.00
CENTROPYXIS CONSTRICTA	400.00		200.00
CHILODONELLA SPECIES	1400.00	3200.00	2300.00
CILIATES UNIDENTIFIED		1000.00	500.00
VORTICELLA SPECIES		1200.00	600.00
GROUP MEAN			3800.00
ROTIFERA			
BDELLOIDEA SPECIES	200.00	400.00	300.00
MONOGONONTA SPECIES	200.00		100.00
NOTHOLCA ACUMINATA		400.00	200.00
GROUP MEAN			600.00
TARDIGRADA			
MACROBIOTUS SPECIES		10.00	5.00
GROUP MEAN			5.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS		120.00	60.00
BRYOCAMPTUS HIEMALIS (COPEPODITES)	10.00	10.00	10.00
GROUP MEAN			70.00

APPENDIX F-5-2 (Continued)

SITE = 3

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII	200.00	800.00	500.00
GROUP MEAN			500.00

APPENDIX F-5-2 (Continued)

SITE = 4

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	200.00		100.00
CENTROPYXIS CONSTRICTA		200.00	100.00
CENTROPYXIS ECORNIS	400.00	600.00	500.00
GROUP MEAN			700.00
ROTIFER			
BDELLOIDEA SPECIES	200.00		100.00
GROUP MEAN			100.00
TARDIGRADA			
MACROBIOTUS SPECIES		10.00	5.00
GROUP MEAN			5.00
OSTRACODA			
OSTRACODA SPECIES	40.00	40.00	40.00
GROUP MEAN			40.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	50.00	40.00	45.00
BRYOCAMPTUS HIEMALIS (COPEPODITES)		30.00	15.00
GROUP MEAN			60.00

APPENDIX F-5-2 (Continued)

SITE = 4

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII	800.00	1400.00	1100.00
GROUP MEAN			1100.00

APPENDIX F-5-2 (Continued)

SITE = 5

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	200.00	200.00	200.00
CENTROPYXIS CONSTRICTA	200.00		100.00
CENTROPYXIS ECORNIS	400.00	400.00	400.00
CILIATES UNIDENTIFIED		600.00	300.00
CYPHODERIA AMPULLA	200.00		100.00
DIFFLUGIA ACUMINATA	200.00		100.00
DIFFLUGIA GRAMEN		200.00	100.00
DIFFLUGIA LEBES	400.00		200.00
VORTICELLA SPECIES		200.00	100.00
GROUP MEAN			1600.00
ROTIFER			
BDELLOIDEA SPECIES	400.00		200.00
EUCHLANIS DILATATA	400.00	200.00	300.00
MONOGONONTA SPECIES	200.00	200.00	200.00
MONOSTYLA LUNARIS	200.00		100.00
NOTHOLCA ACUMINATA	400.00	400.00	400.00
NOTHOLCA SQUAMULA	600.00	800.00	700.00
GROUP MEAN			1900.00

APPENDIX F-5-2 (Continued)

SITE = 5

TAXON	REP A	REP B	MEAN
TARDIGRADA			
MACROBIOTUS SPECIES		10.00	5.00
GROUP MEAN			5.00
CLADOCERA			
ALONA CIRCUMFIMBRIATA		20.00	10.00
CHYDORUS SPHAERICUS	90.00	80.00	85.00
GROUP MEAN			95.00
OSTRACODA			
OSTRACODA SPECIES	20.00		10.00
GROUP MEAN			10.00
COPEPODA (CYCLOPOIDA)			
CYCLOPOID COPEPODITES		20.00	10.00
EUCYCLOPS AGILIS	60.00	10.00	35.00
EUCYCLOPS SPERATUS	10.00		5.00
GROUP MEAN			50.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	20.00	10.00	15.00
GROUP MEAN			15.00

APPENDIX F-5-2 (Continued)

SITE = 5

TAXON	REP A	REP B	MEAN
AMPHIPODA			
HYALELLA AZTECA	20.00		10.00
GROUP MEAN			10.00

APPENDIX F-5-2 (Continued)

SITE = 7

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS CONSTRICTA	600.00	1800.00	1200.00
CENTROPYXIS ECORNIS	200.00	200.00	200.00
CYPHODERIA AMPULLA	200.00		100.00
GROUP MEAN			1500.00
ROTIFER			
BDELLOIDEA SPECIES	200.00		100.00
MONOGONONTA SPECIES	200.00	200.00	200.00
GROUP MEAN			300.00
OSTRACODA			
OSTRACODA SPECIES	100.00	220.00	160.00
GROUP MEAN			160.00
COPEPODA (CYCLOPOIDA)			
EUCYCLOPS AGILIS		10.00	5.00
GROUP MEAN			5.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS		10.00	5.00
GROUP MEAN			5.00

APPENDIX F-5-2 (Continued)

SITE = 7

TAXON	REP A	REP B	MEAN
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS (COPEPODITES)		10.00	5.00
GROUP MEAN			5.00

APPENDIX F-5-2 (Continued)

SITE = 8

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	800.00	200.00	500.00
CENTROPYXIS CONSTRICTA	400.00		200.00
CENTROPYXIS ECORNIS	2000.00	400.00	1200.00
CYPHODERIA AMPULLA	200.00		100.00
GROUP MEAN			2000.00
ROTIFER			
BDELLOIDEA SPECIES	200.00		100.00
MONOGONONTA SPECIES	200.00		100.00
NOTHOLCA SQUAMULA	200.00		100.00
GROUP MEAN			300.00
TARDIGRADA			
MACROBIOTUS SPECIES	30.00	30.00	30.00
GROUP MEAN			30.00
OSTRACODA			
OSTRACODA SPECIES	60.00	40.00	50.00
GROUP MEAN			50.00

APPENDIX F-5-2 (Continued)

SITE = 8

TAXON	REP A	REP B	MEAN
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	120.00	60.00	90.00
BRYOCAMPTUS HIEMALIS (COPEPODITES)	10.00	10.00	10.00
GROUP MEAN			100.00
COPEPODA (GENERAL)			
NAUPLII		400.00	200.00
GROUP MEAN			200.00

APPENDIX F-5-2 (Continued)

SITE = 9

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	600.00	200.00	400.00
CENTROPYXIS CONSTRICTA	800.00	400.00	600.00
CILIATES UNIDENTIFIED	200.00		100.00
CYPHODERIA AMPULLA	400.00	600.00	500.00
GROUP MEAN			1600.00
ROTIFER			
NOTHOLCA SQUAMULA	200.00		100.00
GROUP MEAN			100.00
OSTRACODA			
OSTRACODA SPECIES	130.00	80.00	105.00
GROUP MEAN			105.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS		10.00	5.00
GROUP MEAN			5.00

APPENDIX F-5-2 (Continued)

SITE = 13

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA		200.00	100.00
CENTROPYXIS ECORNIS	200.00		100.00
CILIATES UNIDENTIFIED	800.00	1400.00	1100.00
CYPHODERIA AMPULLA	200.00		100.00
PARAMECIUM SPECIES		200.00	100.00
GROUP MEAN			1500.00
ROTIFER			
CEPHALODELLA SPECIES		200.00	100.00
LEPADELLA PATELLA	200.00		100.00
MONOGONONTA SPECIES		200.00	100.00
NOTHOLCA SQUAMULA	200.00	200.00	200.00
GROUP MEAN			500.00
OSTRACODA			
OSTRACODA SPECIES		10.00	5.00
GROUP MEAN			5.00
COPEPODA (CYCLOPOIDA)			
EUCYCLOPS AGILIS	10.00		5.00
GROUP MEAN			5.00

APPENDIX F-5-2 (Continued)

SITE = 13

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII	200.00		100.00
GROUP MEAN			100.00

APPENDIX F-5-2 (Continued)

SITE = 14

TAXON	REP A	REP B	MEAN
PROTOZOA			
CILIATES UNIDENTIFIED	600.00	200.00	400.00
VORTICELLA SPECIES	800.00	200.00	500.00
GROUP MEAN			900.00
ROTIFER			
BDELLOIDEA SPECIES	400.00		200.00
LEPADELLA PATELLA	200.00		100.00
MONOGONONTA SPECIES		200.00	100.00
NOTHOLCA ACUMINATA	7200.00	9600.00	8400.00
NOTHOLCA SQUAMULA	200.00		100.00
GROUP MEAN			8900.00
CLADOCERA			
CERIODAPHNIA QUADRANGULA		10.00	5.00
SIMOCEPHALUS VETULUS	10.00	10.00	10.00
GROUP MEAN			15.00
COPEPODA (CYCLOPOIDA)			
CYCLOPOID COPEPODITES	10.00		5.00
CYCLOPS VERNALIS		10.00	5.00
GROUP MEAN			10.00

APPENDIX F-5-2 (Continued)

SITE = 14

TAXON	REP A	REP B	MEAN
COPEPODA (CYCLOPOIDA)			
EUCYCLOPS AGILIS		10.00	5.00
GROUP MEAN			5.00
COPEPODA (GENERAL)			
NAUPLII	200.00		100.00
GROUP MEAN			100.00

APPENDIX F-5-2 (Continued)

SITE = 15

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS CONSTRICTA	1200.00	400.00	800.00
CENTROPYXIS ECORNIS	200.00	200.00	200.00
CILIATES UNIDENTIFIED	600.00		300.00
GROUP MEAN			1300.00
ROTIFER			
BDELLOIDEA SPECIES	1400.00	1200.00	1300.00
CEPHALODELLA CATELLINA	1200.00	2600.00	1900.00
LECANE LUNA		200.00	100.00
MONOGONONTA SPECIES	400.00		200.00
NOTHOLCA ACUMINATA	400.00		200.00
GROUP MEAN			3700.00
OSTRACODA			
OSTRACODA SPECIES	20.00	10.00	15.00
GROUP MEAN			15.00
COPEPODA (CYCLOPOIDA)			
CYCLOPOID COPEPODITES	10.00		5.00
CYCLOPS VERNALIS	10.00		5.00
GROUP MEAN			10.00

APPENDIX F-5-2 (Continued)

SITE = 15

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII	200.00		100.00
GROUP MEAN			100.00

APPENDIX F-5-2 (Continued)

SITE = 17

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS CONSTRICTA	200.00		100.00
CENTROPYXIS ECORNIS		600.00	300.00
CILIATES UNIDENTIFIED	3600.00	3000.00	3300.00
PARAMECIUM SPECIES		1200.00	600.00
GROUP MEAN			4300.00
ROTIFER			
BDELLOIDEA SPECIES	1200.00	2200.00	1700.00
CEPHALIDELLA CATELLINA	400.00	5400.00	2900.00
COLURELLA ADRIATICA	200.00		100.00
LEPADELLA PATELLA	200.00		100.00
MONOGONONTA SPECIES		200.00	100.00
GROUP MEAN			4900.00

APPENDIX F-5-2 (Continued)

SITE = 18

TAXON	REP A	REP B	MEAN
PROTOZOA			
CILIATES UNIDENTIFIED	1200.00	600.00	900.00
VORTICELLA SPECIES		3600.00	1800.00
GROUP MEAN			2700.00
ROTIFER			
BDELLOIDEA SPECIES	200.00	600.00	400.00
MONOGONONTA SPECIES	600.00	800.00	700.00
NOTHOLCA ACUMINATA	200.00	400.00	300.00
GROUP MEAN			1400.00
OSTRACODA			
OSTRACODA SPECIES	80.00	150.00	115.00
GROUP MEAN			115.00

APPENDIX F-5-2 (Continued)

SITE = 19

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	600.00	400.00	500.00
CENTROPYXIS CONSTRICTA	800.00	400.00	600.00
CENTROPYXIS ECORNIS	400.00		200.00
CILIATES UNIDENTIFIED		200.00	100.00
DIFFLUGIA ACUMINATA	400.00		200.00
GROUP MEAN			1600.00
ROTIFER			
BDELLOIDEA SPECIES	200.00	200.00	200.00
MONOGONONTA SPECIES	200.00	400.00	300.00
NOTHOLCA ACUMINATA	600.00	400.00	500.00
GROUP MEAN			1000.00
CLADOCERA			
ALONA CIRCUMFIMBRIATA	20.00	30.00	25.00
SIMOCEPHALUS VETULUS		10.00	5.00
GROUP MEAN			30.00
OSTRACODA			
OSTRACODA SPECIES	170.00		85.00
GROUP MEAN			85.00

APPENDIX F-5-2 (Continued)

SITE = 19

TAXON	REP A	REP B	MEAN
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	20.00		10.00
BRYOCAMPTUS HIEMALIS (COPEPODITES)	20.00		10.00
ELAPHOIDELLA SUBGRACILIS		20.00	10.00
GROUP MEAN			30.00
COPEPODA (GENERAL)			
NAUPLII	200.00		100.00
GROUP MEAN			100.00

APPENDIX F-5-2 (Continued)

SITE = 20

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA		200.00	100.00
CENTROPYXIS CONSTRICTA	1400.00	200.00	800.00
CILIATES UNIDENTIFIED	200.00	1400.00	800.00
GROUP MEAN			1700.00
ROTIFER			
MONOGONONTA SPECIES	200.00		100.00
NOTHOLCA ACUMINATA		200.00	100.00
NOTHOLCA SQUAMULA	200.00		100.00
GROUP MEAN			300.00
CLADOCERA			
PLEUROXUS ADUNCUS	10.00		5.00
GROUP MEAN			5.00
COPEPODA (CYCLOPOIDA)			
CYCLOPOID COPEPODITES	90.00	80.00	85.00
EUCYCLOPS AGILIS	10.00	70.00	40.00
GROUP MEAN			125.00

APPENDIX F-5-2 (Continued)

SITE = 20

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII	200.00		100.00
GROUP MEAN			100.00

APPENDIX F-5-2 (Continued)

SITE = 21

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS CONSTRICTA	600.00	400.00	500.00
CILIATES UNIDENTIFIED		200.00	100.00
DIFFLUGIA SPECIES	200.00		100.00
GROUP MEAN			700.00
COPEPODA (CYCLOPOIDA)			
CYCLOPOID COPEPODITES	70.00	90.00	80.00
EUCYCLOPS AGILIS	10.00	30.00	20.00
GROUP MEAN			100.00
COPEPODA (GENERAL)			
NAUPLII		200.00	100.00
GROUP MEAN			100.00

APPENDIX F-5-2 (Continued)

SITE = 22

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS CONSTRICTA	600.00	200.00	400.00
CILIATES UNIDENTIFIED		200.00	100.00
GROUP MEAN			500.00
ROTIFER			
COLURELLA ADRIATICA	400.00		200.00
MONOGONONTA SPECIES		200.00	100.00
NOTHOLCA ACUMINATA	200.00		100.00
GROUP MEAN			400.00
COPEPODA (CYCLOPOIDA)			
CYCLOPOID COPEPODITES	20.00	40.00	30.00
EUCYCLOPS AGILIS	30.00	10.00	20.00
GROUP MEAN			50.00

APPENDIX F-5-2 (Continued)

SITE = 23

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	400.00		200.00
CENTROPYXIS ARCELLOIDES		200.00	100.00
CENTROPYXIS CONSTRICTA	200.00	400.00	300.00
CILIATES UNIDENTIFIED	400.00		200.00
DIFFLUGIA LOBOSTOMA	200.00		100.00
VORTICELLA SPECIES	1800.00		900.00
GROUP MEAN			1800.00
ROTIFER			
COLURELLA ADRIATICA	200.00		100.00
KERATELLA COCHLEARIS		200.00	100.00
MONOGONONTA SPECIES	2000.00	400.00	1200.00
MONOSTYLA LUNARIS	200.00		100.00
GROUP MEAN			1500.00
COPEPODA (CYCLOPOIDA)			
CYCLOPOID COPEPODITES	10.00		5.00
GROUP MEAN			5.00

APPENDIX F-5-2 (Continued)

SITE = 23

TAXON	REP A	REP B	MEAN
COPEPODA (HARPACTICOIDA)			
HARPACTICOID SPECIES	10.00		5.00
GROUP MEAN			5.00
COPEPODA (GENERAL)			
NAUPLII	200.00		100.00
GROUP MEAN			100.00

APPENDIX F-5-2 (Continued)

SITE = 24

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	600.00	200.00	400.00
CENTROPYXIS CONSTRICTA	200.00	200.00	200.00
CENTROPYXIS ECORNIS	200.00		100.00
CILIATES UNIDENTIFIED	600.00	800.00	700.00
RHABDOSTYLA SPECIES		200.00	100.00
VORTICELLA SPECIES	1000.00	2600.00	1800.00
GROUP MEAN			3300.00
ROTIFER			
BDELLOIDEA SPECIES	200.00	600.00	400.00
CEPHALODELLA SPECIES	200.00		100.00
COLURELLA ADRIATICA		400.00	200.00
MONOGONONTA SPECIES	2000.00	400.00	1200.00
MONOSTYLA CLOSTEROCERCA	200.00		100.00
GROUP MEAN			2000.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS		10.00	5.00
HARPACTICOID SPECIES	10.00		5.00
GROUP MEAN			10.00

APPENDIX F-5-2 (Continued)

SITE = 24

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII	200.00		100.00
GROUP MEAN			100.00

APPENDIX F-5-2 (Continued)

SITE = 25

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	400.00	200.00	300.00
CENTROPYXIS ARCELLOIDES	200.00		100.00
CENTROPYXIS CONSTRICTA	400.00	600.00	500.00
CENTROPYXIS ECORNIS	800.00	600.00	700.00
CILIATES UNIDENTIFIED	800.00	800.00	800.00
DIFFLUGIA ACUMINATA		200.00	100.00
DIFFLUGIA LEBES		200.00	100.00
DIFFLUGIA SPECIES		200.00	100.00
EPISTYLIS SPECIES	4200.00	400.00	2300.00
VORTICELLA SPECIES	2000.00	800.00	1400.00
GROUP MEAN			6400.00
ROTIFER			
BDELLOIDEA SPECIES	200.00	800.00	500.00
MONOGONONTA SPECIES	800.00	600.00	700.00
GROUP MEAN			1200.00

APPENDIX F-5-2 (Continued)

SITE = 26

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	200.00	600.00	400.00
CENTROPYXIS CONSTRICTA	800.00	600.00	700.00
CENTROPYXIS ECORNIS	200.00	400.00	300.00
CILIATES UNIDENTIFIED	800.00	200.00	500.00
EPISTYLIS SPECIES	800.00		400.00
VORTICELLA SPECIES	4400.00	200.00	2300.00
GROUP MEAN			4600.00
ROTIFER			
BDELLOIDEA SPECIES	200.00		100.00
CEPHALIDELLA FORFICULA	200.00		100.00
COLURELLA ADRIATICA		200.00	100.00
LECANE FLEXILIS		200.00	100.00
MONOGONONTA SPECIES	400.00	400.00	400.00
GROUP MEAN			800.00

APPENDIX F-5-2 (Continued)

SITE = 27

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	200.00	800.00	500.00
CENTROPYXIS CONSTRICTA	400.00	400.00	400.00
CENTROPYXIS ECORNIS	200.00	400.00	300.00
CILIATES UNIDENTIFIED	3000.00	600.00	1800.00
DIFFLUGIA ACUMINATA	200.00		100.00
VORTICELLA SPECIES	2000.00	4000.00	3000.00
GROUP MEAN			6100.00
ROTIFER			
BDELLOIDEA SPECIES	400.00		200.00
CEPHALODELLA FORFICULA	200.00		100.00
LEPADELLA PATELLA	200.00		100.00
MONOGONONTA SPECIES	1000.00	800.00	900.00
NOTHOLCA ACUMINATA	200.00		100.00
POLYARTHRA VULGARIS	200.00		100.00
GROUP MEAN			1500.00
COPEPODA (CYCLOPOIDA)			
EUCYCLOPS AGILIS	10.00		5.00
GROUP MEAN			5.00

APPENDIX F-5-2 (Continued)

SITE = 27

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII		200.00	100.00
GROUP MEAN			100.00

APPENDIX F-5-2 (Continued)

SITE = 2B

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA		400.00	200.00
CENTROPYXIS ARCELLOIDES	600.00		300.00
CENTROPYXIS CONSTRICTA	800.00	400.00	600.00
CENTROPYXIS ECORNIS		200.00	100.00
CILIATES UNIDENTIFIED	600.00	200.00	400.00
DIFFLUGIA ACUMINATA		200.00	100.00
DIFFLUGIA SPECIES		200.00	100.00
VORTICELLA SPECIES	1600.00	800.00	1200.00
GROUP MEAN			3000.00
ROTIFER			
COLURELLA ADRIATICA		400.00	200.00
LECANE LUNA		200.00	100.00
MONOGONONTA SPECIES	200.00	200.00	200.00
NOTHOLCA SQUAMULA		200.00	100.00
GROUP MEAN			600.00
COPEPODA (CYCLOPOIDA)			
CYCLOPOID COPEPODITES	40.00	20.00	30.00
EUCYCLOPS AGILIS	30.00		15.00
GROUP MEAN			45.00

APPENDIX F-5-2 (Continued)

SITE = 28

TAXON	REF A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII		200.00	100.00
GROUP MEAN			100.00

APPENDIX F-5-2 (Continued)

SITE = 29

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	1600.00	200.00	900.00
CENTROPYXIS ARCELLOIDES		200.00	100.00
CENTROPYXIS CONSTRICTA	2800.00	2200.00	2500.00
CENTROPYXIS ECORNIS	600.00	200.00	400.00
CILIATES UNIDENTIFIED	200.00	1200.00	700.00
DIFFLUGIA GRAMEN		200.00	100.00
VORTICELLA SPECIES	4400.00	2800.00	3600.00
GROUP MEAN			8300.00
ROTIFER			
BDELLOIDEA SPECIES	600.00	200.00	400.00
CEPHALODELLA SPECIES		200.00	100.00
MONOGONONTA SPECIES	1600.00	1600.00	1600.00
MONOSTYLA CLOSTEROCERCA		200.00	100.00
GROUP MEAN			2200.00
COPEPODA (CYCLOPOIDA)			
CYCLOPOID COPEPODITES	10.00		5.00
GROUP MEAN			5.00

APPENDIX F-5-2 (Continued)

SITE = 29

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII	200.00	200.00	200.00
GROUP MEAN			200.00

APPENDIX F-5-2 (Continued)

SITE = 30

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	1400.00	400.00	900.00
CENTROPYXIS ARCELLOIDES		200.00	100.00
CENTROPYXIS CONSTRICTA	600.00	600.00	600.00
CENTROPYXIS ECORNIS		600.00	300.00
CILIATES UNIDENTIFIED	200.00	200.00	200.00
DIFFLUGIA PENARDI	200.00		100.00
DIFFLUGIA SPECIES	200.00		100.00
EPISTYLIS SPECIES	1200.00		600.00
VORTICELLA SPECIES	800.00	1000.00	900.00
GROUP MEAN			3800.00
ROTIFER			
BDELLOIDEA SPECIES	400.00	200.00	300.00
MONOGONONTA SPECIES	1000.00	800.00	900.00
MONOSTYLA CLOSTEROCERCA		200.00	100.00
NOTHOLCA ACUMINATA		200.00	100.00
GROUP MEAN			1400.00

APPENDIX F-5-2 (Continued)

SITE = 31

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	800.00		400.00
CENTROPYXIS ARCELLOIDES	200.00	400.00	300.00
CENTROPYXIS CONSTRICTA	200.00	600.00	400.00
CENTROPYXIS ECORNIS		400.00	200.00
CILIATES UNIDENTIFIED	200.00	400.00	300.00
CYPHODERIA AMPULLA	200.00		100.00
EPISTYLIS SPECIES	1000.00	1000.00	1000.00
VORTICELLA SPECIES	1200.00	1400.00	1300.00
GROUP MEAN			4000.00
ROTIFER			
BDELLOIDEA SPECIES	400.00	200.00	300.00
CEPHALODELLA SPECIES		200.00	100.00
KERATELLA COCHLEARIS	400.00		200.00
LEPADELLA PATELLA	200.00		100.00
MONOGONONTA SPECIES	1300.00	1600.00	1700.00
NOTHOLCA SQUAMULA	200.00		100.00
GROUP MEAN			2500.00

APPENDIX F-5-2 (Continued)

SITE = 32

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	1000.00	600.00	800.00
CENTROPYXIS ARCELLOIDES	200.00		100.00
CENTROPYXIS CONSTRICTA	2000.00	600.00	1300.00
CENTROPYXIS ECORNIS		600.00	300.00
CILIATES UNIDENTIFIED		600.00	300.00
DIFFLUGIA LEBES	200.00		100.00
EPISTYLIS SPECIES	200.00		100.00
VORTICELLA SPECIES	2800.00	3200.00	3000.00
GROUP MEAN			6000.00
ROTIFER			
BDELLOIDEA SPECIES	200.00	200.00	200.00
MONOGONONTA SPECIES	1200.00	3200.00	2200.00
GROUP MEAN			2400.00

APPENDIX F-5-2 (Continued)

SITE = 33

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	800.00	400.00	600.00
CENTROPYXIS ARCELLOIDES	600.00		300.00
CENTROPYXIS CONSTRICTA	400.00		200.00
CENTROPYXIS ECORNIS		400.00	200.00
CILIATES UNIDENTIFIED	200.00		100.00
EPISTYLIS SPECIES	1000.00		500.00
VORTICELLA SPECIES	800.00	2000.00	1400.00
GROUP MEAN			3300.00
ROTIFER			
CEPHALODELLA FORFICULA	200.00		100.00
GASTROPUS SPECIES		200.00	100.00
LEPADELLA PATELLA	200.00		100.00
MONOGONONTA SPECIES	1000.00	2200.00	1600.00
MONOSTYLA CLOSTEROCERCA	200.00		100.00
NOTHOLCA SQUAMULA		200.00	100.00
GROUP MEAN			2100.00

APPENDIX F-5-2 (Continued)

SITE = 34

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA		600.00	300.00
CENTROPYXIS CONSTRICTA	400.00	1200.00	800.00
CENTROPYXIS ECORNIS	200.00		100.00
EPISTYLIS SPECIES		400.00	200.00
VORTICELLA SPECIES	1800.00	2600.00	2200.00
GROUP MEAN			3600.00
ROTIFERA			
BDELLOIDEA SPECIES	200.00		100.00
COLURELLA ADRIATICA	200.00		100.00
KERATELLA COCHLEARIS		200.00	100.00
LEPADELLA OVALIS	200.00		100.00
MONOGONONTA SPECIES	5400.00	3400.00	4400.00
MONOSTYLA BULLA	200.00		100.00
MONOSTYLA CLOSTERICERCA		200.00	100.00
GROUP MEAN			5000.00

APPENDIX F-5-2 (Continued)

SITE = 35

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	800.00	600.00	700.00
CENTROPYXIS ARCELLOIDES		400.00	200.00
CENTROPYXIS CONSTRICTA	1600.00	400.00	1000.00
CENTROPYXIS ECORNIS		200.00	100.00
CHILODONELLA SPECIES	200.00		100.00
CILIATES UNIDENTIFIED	800.00		400.00
DIFFLUGIA GRAMEN	200.00		100.00
EPISTYLIS SPECIES		800.00	400.00
VORTICELLA SPECIES	800.00	1000.00	900.00
GROUP MEAN			3900.00
ROTIFER			
BDELLOIDEA SPECIES	400.00		200.00
COLURELLA ADRIATICA		400.00	200.00
MONOGONONTA SPECIES	2400.00	2600.00	2500.00
POLYARTHRA VULGARIS	200.00		100.00
GROUP MEAN			3000.00
COPEPODA (GENERAL)			
NAUPLII	200.00	200.00	200.00
GROUP MEAN			200.00

APPENDIX F-6-1

ZOOPLANKTON TAXA OBSERVED DURING RBOSP AQUATIC BASELINE STUDIES APRIL 1976

APPENDIX F-6-1

ZOOPLANKTON TAXA OBSERVED DURING RBOSP AQUATIC BASELINE STUDIES, APRIL 1976.

PROTOZOA

- *CENTROPYXIS ACULEATA*
- *CENTROPYXIS ARCELLOIDES*
- *CENTROPYXIS CONSTRICTA*
- *CENTROPYXIS ECORNIS*
- *CHILODONELLA SPECIES*
- *CILIATES UNIDENTIFIED*
- *CYPHODERIA AMPULLA*
- *DIFFLUGIA ACUMINATA*
- *DIFFLUGIA GRAMEN*
- *DIFFLUGIA LEBES*
- *DIFFLUGIA SPECIES*
- *DILEPTUS ANSER*
- *EPISTYLIS SPECIES*
- *EUGLYPHA COMPRESSA*
- *PARAMECIUM AURELIA*
- *RHABDOSTYLA SPECIES*
- *VORTICELLA SPECIES*

ROTIFER

- *ASPLANCHNA SPECIES*
- *BDELLOIDEA SPECIES*
- *BRACHIONUS PLICATILIS*

RBOSP PROGRESS REPORT

APPENDIX F-6-1 (Continued)

ROTIFER

CEPHALODELLA CATELLINA
CEPHALODELLA FORFICULA
CEPHALODELLA GIBBA
CEPHALODELLA SPECIES
CEPHALODELLA VOLVOCICOLA
CHROMOGASTER OVALIS
COLURELLA ADRIATICA
KERATELLA QUADRATA
LEPADELLA OVALIS
LEPADELLA PATELLA
MONOGONONTA SPECIES
MONOSTYLA LUNA
NOTHOLCA ACUMINATA
NOTHOLCA FOLIACEA
NOTHOLCA SQUAMULA
POLYARTHRA VULGARIS
SYNCHAETA PECTINATA
TRICHOCERCA MULTICRINIS
TRICHOTRIA POCILLUM
TRICHOTRIA TETRACTIS

TARDIGRADA

ECHINISCUS SPECIES

APPENDIX F-6-1 (Continued)

TARDIGRADA

TARDIGRADA UNIDENTIFIED

CLADOCERA

ALONA CIRCUMFIMBRIATA

CHYDORUS SPHAERICUS

PLEUROXUS ADUNCUS

OSTRACODA

OSTRACODA SPECIES

COPEPODA (CYCLOPOIDA)

CYCLOPOID COPEPODITES

EUCYCLOPS AGILIS

EUCYCLOPS SPERATUS

PARACYCLOPS FIMBRIATUS POPPEI

COPEPODA (HARPACTICOIDA)

BRYOCAMPTUS HIEMALIS

BRYOCAMPTUS HIEMALIS (COPEPODITES)

BRYOCAMPTUS SPECIES

ELAPHOIDELLA SUBGRACILIS

HARPACTICOID COPEPODITES

MORARIA AFFINIS

COPEPODA (GENERAL)

NAUPLII

AMPHIPODA

HYALELLA AZTECA

APPENDIX F-6-2

DENSITIES OF ZOOPLANKTON OBSERVED DURING RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX [illegible]-2

DENSITIES OF ZOOPLANKTON OBSERVED DURING RBOSP AQUATIC BASELINE STUDIES, APRIL 1976.[1] (Data are expressed as organisms/m^3)

SITE = 2

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	200.00	400.00	300.00
CENTROPYXIS ARCELLOIDES		400.00	200.00
CENTROPYXIS CONSTRICTA	400.00	2800.00	1600.00
CILIATES UNIDENTIFIED		200.00	100.00
GROUP MEAN			2200.00
ROTIFER			
BDELLOIDEA SPECIES	200.00	1800.00	1000.00
CHROMOGASTER OVALIS	200.00		100.00
COLURELLA ADRIATICA		200.00	100.00
MONOGONONTA SPECIES	400.00	400.00	400.00
NOTHOLCA ACUMINATA		200.00	100.00
GROUP MEAN			1700.00
TARDIGRADA			
TARDIGRADA UNIDENTIFIED		30.00	15.00
GROUP MEAN			15.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	150.00	1870.00	1010.00
GROUP MEAN			1010.00

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[1] Stations [illegible] 6, 10, 12 [illegible] 16 [illegible]

PROGRESS REPORT

APPENDIX F-6-2 (Continued)

SITE = 2

TAXON	REP A	REP B	MEAN
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS (COPEPODITES)	10.00	500.00	255.00
MORARIA AFFINIS	10.00		5.00
GROUP MEAN			260.00
COPEPODA (GENERAL)			
NAUPLII	3800.00	6600.00	5200.00
GROUP MEAN			5200.00

APPENDIX F-6-2 (Continued)

SITE = 3

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS CONSTRICTA	200.00	600.00	400.00
CILIATES UNIDENTIFIED	200.00	200.00	200.00
GROUP MEAN			600.00
ROTIFER			
BDELLOIDEA SPECIES		400.00	200.00
CEPHALODELLA SPECIES	600.00		300.00
MONOGONONTA SPECIES	200.00		100.00
NOTHOLCA ACUMINATA	400.00	400.00	400.00
GROUP MEAN			1000.00
TARDIGRADA			
TARDIGRADA UNIDENTIFIED		10.00	5.00
GROUP MEAN			5.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	10.00	20.00	15.00
BRYOCAMPTUS HIEMALIS (COPEPODITES)		10.00	5.00
GROUP MEAN			20.00

APPENDIX F-6-2 (Continued)

SITE = 3

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII		400.00	200.00
GROUP MEAN			200.00

APPENDIX F-6-2 (Continued)

SITE = 4

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA		800.00	400.00
CENTROPYXIS CONSTRICTA	1200.00	1200.00	1200.00
CENTROPYXIS ECORNIS	200.00	600.00	400.00
CILIATES UNIDENTIFIED	200.00		100.00
GROUP MEAN			2100.00
ROTIFER			
NOTHOLCA ACUMINATA		200.00	100.00
GROUP MEAN			100.00
TARDIGRADA			
TARDIGRADA UNIDENTIFIED		60.00	30.00
GROUP MEAN			30.00
OSTRACODA			
OSTRACODA SPECIES	400.00	420.00	410.00
GROUP MEAN			410.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	80.00	260.00	170.00
GROUP MEAN			170.00

APPENDIX F-6-2 (Continued)

SITE = 4

TAXON	REP A	REP B	MEAN
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS (COPEPODITES)	10.00		5.00
GROUP MEAN			5.00
COPEPODA (GENERAL)			
NAUPLII	600.00	200.00	400.00
GROUP MEAN			400.00

APPENDIX F-6-2 (Continued)

SITE = 5

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	800.00	600.00	700.00
CENTROPYXIS ARCELLOIDES	200.00		100.00
CENTROPYXIS CONSTRICTA	1800.00	1400.00	1600.00
DIFFLUGIA GRAMEN		400.00	200.00
GROUP MEAN			2600.00
ROTIFER			
BDELLOIDEA SPECIES	400.00		200.00
COLURELLA ADRIATICA		200.00	100.00
LEPADELLA PATELLA	400.00		200.00
NOTHOLCA ACUMINATA	400.00	600.00	500.00
NOTHOLCA SQUAMULA	200.00	600.00	400.00
GROUP MEAN			1400.00
TARDIGRADA			
TARDIGRADA UNIDENTIFIED	10.00		5.00
GROUP MEAN			5.00
CLADOCERA			
ALONA CIRCUMFIMBRIATA	10.00	10.00	10.00
GROUP MEAN			10.00

APPENDIX F-6-2 (Continued)

SITE = 5

TAXON	REP A	REP B	MEAN
CLADOCERA			
CHYDORUS SPHAERICUS	20.00		10.00
PLEUROXUS ADUNCUS		10.00	5.00
GROUP MEAN			15.00
OSTRACODA			
OSTRACODA SPECIES	30.00	60.00	45.00
GROUP MEAN			45.00
COPEPODA (CYCLOPOIDA)			
CYCLOPOID COPEPODITES	20.00		10.00
EUCYCLOPS SPERATUS	60.00	80.00	70.00
PARACYCLOPS FIMBRIATUS POPPEI	10.00		5.00
GROUP MEAN			85.00
COPEPODA (GENERAL)			
NAUPLII		200.00	100.00
GROUP MEAN			100.00
AMPHIPODA			
HYALELLA AZTECA	10.00	10.00	10.00
GROUP MEAN			10.00

APPENDIX F-6-2 (Continued)

SITE = 6

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	200.00		200.00
CENTROPYXIS CONSTRICTA	2200.00		2200.00
GROUP MEAN			2400.00
ROTIFER			
BDELLOIDEA SPECIES	1200.00		1200.00
MONOGONONTA SPECIES	200.00		200.00
GROUP MEAN			1400.00
OSTRACODA			
OSTRACODA SPECIES	210.00		210.00
GROUP MEAN			210.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	20.00		20.00
GROUP MEAN			20.00

APPENDIX F-6-2 (Continued)

SITE = 7

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA		200.00	200.00
CENTROPYXIS ARCELLOIDES		1000.00	1000.00
CENTROPYXIS CONSTRICTA		2400.00	2400.00
CYPHODERIA AMPULLA		200.00	200.00
GROUP MEAN			3800.00
ROTIFER			
BDELLOIDEA SPECIES		1200.00	1200.00
COLURELLA ADRIATICA		200.00	200.00
MONOGONONTA SPECIES		200.00	200.00
NOTHOLCA ACUMINATA		200.00	200.00
GROUP MEAN			1800.00
OSTRACODA			
OSTRACODA SPECIES		470.00	470.00
GROUP MEAN			470.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS		20.00	20.00
GROUP MEAN			20.00

APPENDIX F-6-2 (Continued)

SITE = B

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS CONSTRICTA	200.00		100.00
GROUP MEAN			100.00
ROTIFER			
BDELLOIDEA SPECIES	200.00	400.00	300.00
GROUP MEAN			300.00
OSTRACODA			
OSTRACODA SPECIES	120.00	60.00	90.00
GROUP MEAN			90.00
COPEPODA (GENERAL)			
NAUPLII	200.00		100.00
GROUP MEAN			100.00

APPENDIX F-6-2 (Continued)

SITE = 9

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS CONSTRICTA	1400.00	2200.00	1800.00
CYPHODERIA AMPULLA	1000.00		500.00
GROUP MEAN			2300.00
ROTIFER			
BDELLOIDEA SPECIES	3800.00	600.00	2200.00
MONOGONONTA SPECIES	200.00		100.00
NOTHOLCA ACUMINATA	1800.00		900.00
NOTHOLCA SQUAMULA	400.00	200.00	300.00
GROUP MEAN			3500.00
OSTRACODA			
OSTRACODA SPECIES	240.00	330.00	285.00
GROUP MEAN			285.00
COPEPODA (CYCLOPOIDA)			
EUCYCLOPS AGILIS	10.00		5.00
GROUP MEAN			5.00

APPENDIX F-6-2 (Continued)

SITE = 9

TAXON	REP A	REP B	MEAN
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	10.00	10.00	10.00
BRYOCAMPTUS HIEMALIS (COPEPODITES)	10.00		5.00
GROUP MEAN			15.00
COPEPODA (GENERAL)			
NAUPLII	800.00	400.00	600.00
GROUP MEAN			600.00

APPENDIX F-6-2 (Continued)

SITE = 13

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	200.00		100.00
CENTROPYXIS CONSTRICTA	600.00		300.00
CILIATES UNIDENTIFIED	200.00		100.00
GROUP MEAN			500.00
ROTIFER			
BDELLOIDEA SPECIES	200.00		100.00
GROUP MEAN			100.00
OSTRACODA			
OSTRACODA SPECIES	30.00		15.00
GROUP MEAN			15.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS		10.00	5.00
GROUP MEAN			5.00

APPENDIX F-6-2 (Continued)

SITE = 14

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ARCELLOIDES		200.00	100.00
CENTROPYXIS CONSTRICTA	1000.00	1000.00	1000.00
CILIATES UNIDENTIFIED	200.00		100.00
DIFFLUGIA GRAMEN		200.00	100.00
DIFFLUGIA LEBES		200.00	100.00
EPISTYLIS SPECIES	2600.00		1300.00
PARAMECIUM AURELIA	200.00		100.00
VORTICELLA SPECIES	2000.00	2000.00	2000.00
GROUP MEAN			4800.00
ROTIFER			
BDELLOIDEA SPECIES	7000.00	5800.00	6400.00
CEPHALODELLA CATELLINA	600.00		300.00
CEPHALODELLA VOLVOCICOLA		400.00	200.00
COLURELLA ADRIATICA		200.00	100.00
LEPADELLA PATELLA	1400.00	1200.00	1300.00
MONOGONONTA SPECIES	1000.00	2800.00	1900.00
NOTHOLCA ACUMINATA	57200.00	33200.00	45200.00
NOTHOLCA SQUAMULA	1400.00	600.00	1000.00
GROUP MEAN			56400.00

APPENDIX F-6-2 (Continued)

SITE = 14

TAXON	REP A	REP B	MEAN
OSTRACODA			
OSTRACODA SPECIES	40.00	30.00	35.00
GROUP MEAN			35.00
COPEPODA (CYCLOPOIDA)			
CYCLOPOID COPEPODITES	20.00	10.00	15.00
PARACYCLOPS FIMBRIATUS POPPEI	20.00		10.00
GROUP MEAN			25.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	10.00		5.00
BRYOCAMPTUS HIEMALIS (COPEPODITES)	10.00		5.00
GROUP MEAN			10.00
COPEPODA (GENERAL)			
NAUPLII	200.00		100.00
GROUP MEAN			100.00

APPENDIX F-6-2 (Continued)

SITE = 15

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA		200.00	100.00
CILIATES UNIDENTIFIED	200.00	200.00	200.00
GROUP MEAN			300.00
ROTIFER			
BDELLOIDEA SPECIES	400.00		200.00
MONOGONONTA SPECIES		200.00	100.00
NOTHOLCA ACUMINATA	1000.00		500.00
GROUP MEAN			800.00
OSTRACODA			
OSTRACODA SPECIES		10.00	5.00
GROUP MEAN			5.00

APPENDIX F-6-2 (Continued)

SITE = 17

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS CONSTRICTA	200.00		100.00
GROUP MEAN			100.00
OSTRACODA			
OSTRACODA SPECIES	10.00		5.00
GROUP MEAN			5.00
COPEPODA (GENERAL)			
NAUPLII		.00	.00

APPENDIX F-6-2 (Continued)

SITE = 18

TAXON	REP A	REP B	MEAN
PROTOZOA			
CILIATES UNIDENTIFIED	200.00	400.00	300.00
GROUP MEAN			300.00

APPENDIX F-6-2 (Continued)

SITE = 19

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	200.00		100.00
CENTROPYXIS CONSTRICTA	1000.00		500.00
CILIATES UNIDENTIFIED	200.00		100.00
DIFFLUGIA SPECIES		200.00	100.00
VORTICELLA SPECIES	400.00		200.00
GROUP MEAN			1000.00
ROTIFER			
BDELLOIDEA SPECIES	400.00		200.00
LEPADELLA PATELLA	200.00		100.00
MONOGONONTA SPECIES		200.00	100.00
GROUP MEAN			400.00
COPEPODA (CYCLOPOIDA)			
EUCYCLOPS AGILIS	10.00		5.00
GROUP MEAN			5.00
COPEPODA (HARPACTICOIDA)			
ELAPHOIDELLA SUBGRACILIS	20.00	90.00	55.00
GROUP MEAN			55.00

APPENDIX F-6-2 (Continued)

SITE = 19

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII		400.00	200.00
GROUP MEAN			200.00
AMPHIPODA			
HYALELLA AZTECA	20.00	10.00	15.00
GROUP MEAN			15.00

APPENDIX F-6-2 (Continued)

SITE = 20

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS CONSTRICTA	600.00	200.00	400.00
CILIATES UNIDENTIFIED		200.00	100.00
GROUP MEAN			500.00
ROTIFER			
CEPHALODELLA VOLVOCICOLA	200.00		100.00
MONOGONONTA SPECIES		400.00	200.00
NOTHOLCA ACUMINATA	400.00	200.00	300.00
GROUP MEAN			600.00
OSTRACODA			
OSTRACODA SPECIES	20.00	10.00	15.00
GROUP MEAN			15.00
COPEPODA (CYCLOPOIDA)			
EUCYCLOPS AGILIS	10.00		5.00
GROUP MEAN			5.00
COPEPODA (GENERAL)			
NAUPLII	200.00	200.00	200.00
GROUP MEAN			200.00

APPENDIX F-6-2 (Continued)

SITE = 21

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ARCELLOIDES		200.00	100.00
CENTROPYXIS CONSTRICTA	600.00	200.00	400.00
CILIATES UNIDENTIFIED	200.00	200.00	200.00
VORTICELLA SPECIES		200.00	100.00
GROUP MEAN			800.00
ROTIFER			
CEPHALODELLA VOLVOCICOLA	200.00		100.00
MONOGONONTA SPECIES		800.00	400.00
GROUP MEAN			500.00
OSTRACODA			
OSTRACODA SPECIES	30.00	30.00	30.00
GROUP MEAN			30.00
COPEPODA (CYCLOPOIDA)			
EUCYCLOPS AGILIS	20.00		10.00
GROUP MEAN			10.00

APPENDIX F-6-2 (Continued)

SITE = 21

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII	200.00		100.00
GROUP MEAN			100.00

APPENDIX F-6-2 (Continued)

SITE = 22

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	200.00		100.00
CENTROPYXIS CONSTRICTA	400.00	800.00	600.00
CENTROPYXIS ECORNIS		200.00	100.00
CILIATES UNIDENTIFIED		400.00	200.00
GROUP MEAN			1000.00
ROTIFER			
BDELLOIDEA SPECIES	200.00		100.00
MONOGONONTA SPECIES		200.00	100.00
TRICHOCERCA MULTICRINIS		200.00	100.00
GROUP MEAN			300.00
OSTRACODA			
OSTRACODA SPECIES	10.00	10.00	10.00
GROUP MEAN			10.00
COPEPODA (GENERAL)			
NAUPLII		400.00	200.00
GROUP MEAN			200.00

APPENDIX F-6-2 (Continued)

SITE = 23

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	400.00		200.00
CENTROPYXIS ARCELLOIDES	200.00	200.00	200.00
CENTROPYXIS CONSTRICTA	4000.00	400.00	2200.00
CENTROPYXIS ECORNIS		200.00	100.00
CILIATES UNIDENTIFIED	600.00		300.00
EPISTYLIS SPECIES	3200.00		1600.00
VORTICELLA SPECIES	600.00	3800.00	2200.00
GROUP MEAN			6800.00
ROTIFER			
BDELLOIDEA SPECIES	800.00	600.00	700.00
CEPHALODELLA GIBBA	200.00		100.00
MONOGONONTA SPECIES	400.00	2000.00	1200.00
NOTHOLCA SQUAMULA	600.00	400.00	500.00
GROUP MEAN			2500.00
TARDIGRADA			
TARDIGRADA UNIDENTIFIED		40.00	20.00
GROUP MEAN			20.00

APPENDIX F-6-2 (Continued)

SITE = 23

TAXON	REP A	REP B	MEAN
CLADOCERA			
CHYDORUS SPHAERICUS	10.00		5.00
GROUP MEAN			5.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS SPECIES	10.00	10.00	10.00
GROUP MEAN			10.00
COPEPODA (GENERAL)			
NAUPLII	200.00	400.00	300.00
GROUP MEAN			300.00

SITE = 24

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	600.00	1800.00	1200.00
CENTROPYXIS ARCELLOIDES	200.00	1200.00	700.00
CENTROPYXIS CONSTRICTA	2600.00	3400.00	3000.00
CENTROPYXIS ECORNIS		200.00	100.00
CILIATES UNIDENTIFIED	200.00		100.00
EPISTYLIS SPECIES		2800.00	1400.00
VORTICELLA SPECIES	1200.00	1800.00	1500.00
GROUP MEAN			8000.00
ROTIFER			
BDELLOIDEA SPECIES	800.00		400.00
CEPHALODELLA GIBBA		200.00	100.00
CEPHALODELLA VOLVOCICOLA	200.00		100.00
KERATELLA QUADRATA	200.00		100.00
MONOGONONTA SPECIES	200.00	600.00	400.00
NOTHOLCA SQUAMULA		200.00	100.00
TRICHOTRIA POCILLUM		400.00	200.00
GROUP MEAN			1400.00

APPENDIX F-6-2 (Continued)

SITE = 24

TAXON	REP A	REP B	MEAN
TARDIGRADA			
TARDIGRADA UNIDENTIFIED	10.00	30.00	20.00
GROUP MEAN			20.00
COPEPODA (HARPACTICOIDA)			
HARPACTICOID COPEPODITES	10.00		5.00
GROUP MEAN			5.00
COPEPODA (GENERAL)			
NAUPLII	200.00	400.00	300.00
GROUP MEAN			300.00

APPENDIX F-6-2 (Continued)

SITE = 25

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	600.00	600.00	600.00
CENTROPYXIS CONSTRICTA	3000.00	1400.00	2200.00
CENTROPYXIS ECORNIS		200.00	100.00
CILIATES UNIDENTIFIED	800.00		400.00
DIFFLUGIA ACUMINATA		200.00	100.00
EPISTYLIS SPECIES	200.00	1600.00	900.00
RHABDOSTYLA SPECIES		200.00	100.00
VORTICELLA SPECIES	600.00	600.00	600.00
GROUP MEAN			5000.00
ROTIFER			
BDELLOIDEA SPECIES	2000.00	200.00	1100.00
BRACHIONUS PLICATILIS		200.00	100.00
CEPHALODELLA GIBBA		200.00	100.00
KERATELLA QUADRATA	200.00		100.00
LEPADELLA OVALIS		200.00	100.00
MONOGONONTA SPECIES	1000.00	1400.00	1200.00
NOTHOLCA ACUMINATA	400.00		200.00
NOTHOLCA SQUAMULA	800.00	600.00	700.00
POLYARTHRA VULGARIS	200.00		100.00
GROUP MEAN			3700.00

APPENDIX F-6-2 (Continued)

SITE = 25

TAXON	REP A	REP B	MEAN
ROTIFER			
TRICHOCERCA MULTICRINIS		200.00	100.00
GROUP MEAN			100.00
TARDIGRADA			
ECHINISCUS SPECIES		10.00	5.00
TARDIGRADA UNIDENTIFIED		20.00	10.00
GROUP MEAN			15.00
COPEPODA (HARPACTICOIDA)			
HARPACTICOID COPEPODITES		30.00	15.00
GROUP MEAN			15.00
COPEPODA (GENERAL)			
NAUPLII		200.00	100.00
GROUP MEAN			100.00

APPENDIX F-6-2 (Continued)

SITE = 26

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	400.00	400.00	400.00
CENTROPYXIS CONSTRICTA	2000.00	600.00	1300.00
CENTROPYXIS ECORNIS		200.00	100.00
CILIATES UNIDENTIFIED	400.00		200.00
EPISTYLIS SPECIES	400.00	3200.00	1800.00
VORTICELLA SPECIES	8600.00	1800.00	5200.00
GROUP MEAN			9000.00
ROTIFER			
BDELLOIDEA SPECIES	1600.00	1200.00	1400.00
CEPHALODELLA GIBBA	200.00	400.00	300.00
CEPHALODELLA SPECIES	200.00	200.00	200.00
MONOGONONTA SPECIES	1600.00	1400.00	1500.00
NOTHOLCA ACUMINATA	600.00	400.00	500.00
NOTHOLCA SQUAMULA	1400.00	1400.00	1400.00
GROUP MEAN			5300.00
TARDIGRADA			
TARDIGRADA UNIDENTIFIED		30.00	15.00
GROUP MEAN			15.00

APPENDIX F-6-2 (Continued)

SITE = 26

TAXON	REP A	REP B	MEAN
CLADOCERA			
CHYDORUS SPHAERICUS		10.00	5.00
GROUP MEAN			5.00
COPEPODA (HARPACTICOIDA)			
ELAPHOIDELLA SUBGRACILIS		10.00	5.00
HARPACTICOID COPEPODITES		20.00	10.00
GROUP MEAN			15.00
COPEPODA (GENERAL)			
NAUPLII	400.00		200.00
GROUP MEAN			200.00

APPENDIX F-6-2 (Continued)

SITE = 27

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	400.00	400.00	400.00
CENTROPYXIS ARCELLOIDES		200.00	100.00
CENTROPYXIS CONSTRICTA	3600.00	3200.00	3400.00
CILIATES UNIDENTIFIED		400.00	200.00
DIFFLUGIA LEBES	200.00		100.00
EPISTYLIS SPECIES	3800.00		1900.00
EUGLYPHA COMPRESSA		200.00	100.00
VORTICELLA SPECIES	400.00	3000.00	1700.00
GROUP MEAN			7900.00
ROTIFER			
ASPLANCHNA SPECIES	200.00		100.00
BDELLOIDEA SPECIES	1400.00	200.00	800.00
CEPHALODELLA GIBBA	400.00		200.00
MONOGONONTA SPECIES	1200.00	1800.00	1500.00
NOTHOLCA ACUMINATA		200.00	100.00
NOTHOLCA SQUAMULA	600.00	1000.00	800.00
GROUP MEAN			3500.00

APPENDIX F-6-2 (Continued)

SITE * 27

TAXON	REP A	REP B	MEAN
TARDIGRADA			
TARDIGRADA UNIDENTIFIED		10.00	5.00
GROUP MEAN			5.00
OSTRACODA			
OSTRACODA SPECIES		20.00	10.00
GROUP MEAN			10.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS		20.00	10.00
GROUP MEAN			10.00
COPEPODA (GENERAL)			
NAUPLII	200.00	400.00	300.00
GROUP MEAN			300.00

APPENDIX F-6-2 (Continued)

SITE = 28

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	800.00	1200.00	1000.00
CENTROPYXIS ARCELLOIDES	400.00	800.00	600.00
CENTROPYXIS CONSTRICTA	3000.00	8000.00	5500.00
CENTROPYXIS ECORNIS	400.00		200.00
DIFFLUGIA LEBES		200.00	100.00
EPISTYLIS SPECIES		600.00	300.00
VORTICELLA SPECIES	3600.00	1600.00	2600.00
GROUP MEAN			10300.00
ROTIFER			
BDELLUIDEA SPECIES	800.00	200.00	500.00
CEPHALODELLA GIBBA	200.00	200.00	200.00
MONOGONONTA SPECIES	200.00	1600.00	900.00
NOTHOLCA ACUMINATA	400.00		200.00
NOTHOLCA SQUAMULA	400.00	800.00	600.00
POLYARTHRA VULGARIS	200.00		100.00
GROUP MEAN			2500.00
TARDIGRADA			
TARDIGRADA UNIDENTIFIED		30.00	15.00
GROUP MEAN			15.00

APPENDIX F-6-2 (Continued)

SITE = 28

TAXON	REP A	REP B	MEAN
OSTRACODA			
OSTRACODA SPECIES	20.00		10.00
GROUP MEAN			10.00
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS		20.00	10.00
GROUP MEAN			10.00
COPEPODA (GENERAL)			
NAUPLII		400.00	200.00
GROUP MEAN			200.00

APPENDIX F-6-2 (Continued)

COLLECTION METHOD - SUBMERSIBLE PUMP

SITE = 29

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	1000.00	800.00	900.00
CENTROPYXIS ARCELLOIDES	200.00	400.00	300.00
CENTROPYXIS CONSTRICTA	4000.00	5200.00	4600.00
CENTROPYXIS ECORNIS	600.00		300.00
CILIATES UNIDENTIFIED	400.00		200.00
DIFFLUGIA GRAMEN		200.00	100.00
EPISTYLIS SPECIES	2600.00		1300.00
VORTICELLA SPECIES	400.00	400.00	400.00
GROUP MEAN			8100.00
ROTIFER			
CEPHALODELLA GIBBA	400.00		200.00
MONOGONONTA SPECIES	1000.00	600.00	800.00
NOTHOLCA ACUMINATA	800.00		400.00
NOTHOLCA SQUAMULA	400.00	600.00	500.00
POLYARTHRA VULGARIS	200.00		100.00
GROUP MEAN			2000.00
COPEPODA (GENERAL)			
NAUPLII	400.00		200.00
GROUP MEAN			200.00

APPENDIX F-6-2 (Continued)

COLLECTION METHOD - SUBMERSIBLE PUMP

SITE = 30

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	600.00	1000.00	800.00
CENTROPYXIS ARCELLOIDES	400.00		200.00
CENTROPYXIS CONSTRICTA	3000.00	3600.00	3300.00
CILIATES UNIDENTIFIED	600.00	200.00	400.00
EPISTYLIS SPECIES	1600.00		800.00
VORTICELLA SPECIES	3800.00	1000.00	2400.00
GROUP MEAN			7900.00
ROTIFER			
ASPLANCHNA SPECIES	200.00		100.00
BDELLOIDEA SPECIES	600.00	200.00	400.00
CEPHALODELLA FORFICULA	200.00		100.00
CEPHALODELLA GIBBA	600.00		300.00
MONOGONONTA SPECIES	2000.00	800.00	1400.00
NOTHOLCA ACUMINATA	200.00		100.00
NOTHOLCA SQUAMULA	600.00	400.00	500.00
GROUP MEAN			2900.00
COPEPODA (GENERAL)			
NAUPLII	200.00		100.00
GROUP MEAN			100.00

APPENDIX F-6-2 (Continued)

SITE = 31

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	800.00	800.00	800.00
CENTROPYXIS ARCELLOIDES	400.00	800.00	600.00
CENTROPYXIS CONSTRICTA	4600.00	4600.00	4600.00
CENTROPYXIS ECORNIS	600.00		300.00
CILIATES UNIDENTIFIED	200.00	400.00	300.00
DIFFLUGIA GRAMEN		200.00	100.00
DIFFLUGIA LEBES	200.00	200.00	200.00
EPISTYLIS SPECIES	4200.00		2100.00
VORTICELLA SPECIES	3600.00	7200.00	5400.00
GROUP MEAN			14400.00
ROTIFER			
BDELLOIDEA SPECIES	800.00	1000.00	900.00
MONOGONONTA SPECIES	1400.00	2400.00	1900.00
NOTHOLCA ACUMINATA	200.00	200.00	200.00
NOTHOLCA FOLIACEA	200.00		100.00
NOTHOLCA SQUAMULA	400.00	800.00	600.00
TRICHOTRIA TETRACTIS	200.00		100.00
GROUP MEAN			3800.00

APPENDIX F-6-2 (Continued)

SITE = 31

TAXON	REP A	REP B	MEAN
COPEPODA (HARPACTICOIDA)			
MORARIA AFFINIS		10.00	5.00
GROUP MEAN			5.00
COPEPODA (GENERAL)			
NAUPLII	400.00		200.00
GROUP MEAN			200.00

APPENDIX F-6-2 (Continued)

SITE = 32

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	1000.00	800.00	900.00
CENTROPYXIS ARCELLOIDES	200.00		100.00
CENTROPYXIS CONSTRICTA	2400.00	2400.00	2400.00
CILIATES UNIDENTIFIED	200.00		100.00
EPISTYLIS SPECIES	2200.00		1100.00
VORTICELLA SPECIES	600.00	600.00	600.00
GROUP MEAN			5200.00
ROTIFER			
BDELLOIDEA SPECIES	1400.00		700.00
CEPHALODELLA GIBBA	200.00		100.00
MONOGONONTA SPECIES	800.00	1000.00	900.00
MONOSTYLA LUNA		200.00	100.00
NOTHOLCA SQUAMULA	400.00	200.00	300.00
GROUP MEAN			2100.00
COPEPODA (GENERAL)			
NAUPLII	200.00	200.00	200.00
GROUP MEAN			200.00

APPENDIX F-6-2 (Continued)

SITE = 33

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	600.00	200.00	400.00
CENTROPYXIS ARCELLOIDES	400.00	400.00	400.00
CENTROPYXIS CONSTRICTA	2200.00	4000.00	3100.00
CENTROPYXIS ECORNIS	400.00		200.00
CILIATES UNIDENTIFIED	400.00	400.00	400.00
DILEPTUS ANSER		200.00	100.00
EPISTYLIS SPECIES	3400.00	1000.00	2200.00
VORTICELLA SPECIES	5600.00	400.00	3000.00
GROUP MEAN			9800.00
ROTIFER			
BDELLOIDEA SPECIES	400.00		200.00
MONOGONONTA SPECIES	800.00	1200.00	1000.00
NOTHOLCA SQUAMULA	1200.00	200.00	700.00
SYNCHAETA PECTINATA	200.00		100.00
GROUP MEAN			2000.00
COPEPODA (GENERAL)			
NAUPLII	200.00		100.00
GROUP MEAN			100.00

APPENDIX F-6-2 (Continued)

SITE = 34

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	400.00	800.00	600.00
CENTROPYXIS CONSTRICTA	3000.00	4400.00	3700.00
CENTROPYXIS ECORNIS	400.00		200.00
CHILODONELLA SPECIES	200.00		100.00
CILIATES UNIDENTIFIED	400.00	400.00	400.00
DIFFLUGIA ACUMINATA	200.00		100.00
DIFFLUGIA GRAMEN		200.00	100.00
EPISTYLIS SPECIES	600.00	200.00	400.00
VORTICELLA SPECIES	3000.00		1500.00
GROUP MEAN			7100.00
ROTIFER			
BDELLOIDEA SPECIES	400.00	400.00	400.00
CEPHALODELLA GIBBA	200.00	200.00	200.00
MONOGONONTA SPECIES	1600.00	400.00	1000.00
NOTHOLCA ACUMINATA	200.00		100.00
NOTHOLCA SQUAMULA	600.00	200.00	400.00
GROUP MEAN			2100.00

APPENDIX F-6-2 (Continued)

SITE = 34

TAXON	REP A	REP B	MEAN
COPEPODA (HARPACTICOIDA)			
BRYOCAMPTUS HIEMALIS	10.00		5.00
GROUP MEAN			5.00

APPENDIX F-6-2 (Continued)

SITE = 35

TAXON	REP A	REP B	MEAN
PROTOZOA			
CENTROPYXIS ACULEATA	1400.00	800.00	1100.00
CENTROPYXIS ARCELLOIDES	200.00	200.00	200.00
CENTROPYXIS CONSTRICTA	1800.00	5000.00	3400.00
CENTROPYXIS ECORNIS	800.00		400.00
CILIATES UNIDENTIFIED	200.00		100.00
DIFFLUGIA GRAMEN		600.00	300.00
EPISTYLIS SPECIES	3400.00	3200.00	3300.00
VORTICELLA SPECIES	400.00	600.00	500.00
GROUP MEAN			9300.00
ROTIFER			
BDELLOIDEA SPECIES	600.00	800.00	700.00
MONOGONONTA SPECIES	1600.00	1200.00	1400.00
NOTHOLCA ACUMINATA	200.00		100.00
NOTHOLCA SQUAMULA	400.00	200.00	300.00
GROUP MEAN			2500.00
COPEPODA (HARPACTICOIDA)			
HARPACTICOID COPEPODITES		10.00	5.00
GROUP MEAN			5.00

APPENDIX F-6-2 (Continued)

SITE = 35

TAXON	REP A	REP B	MEAN
COPEPODA (GENERAL)			
NAUPLII	200.00	200.00	200.00
GROUP MEAN			200.00

2.4.4 Periphyton

A list of algal taxa observed in the periphyton during April 1976 is presented in Appendix F-7-1. A total of 97 taxa was observed in the April collections. Quantitative periphyton data from natural substrates are presented in Appendix F-7-2 and data from artificial substrates are presented in Appendix F-7-3.

Periphytic algal densities were low at the headwater stations during April, except at Station 5. The most abundant algal taxa at the headwaters included Bicoeca lacustris, Navicula pelliculosa, and Achnanthes minutissima and Gomphonema intricatum (which were particularly abundant at Station 5). At the tract stations, the most abundant algal taxa were Bicoeca lacustris, Gomphonema intricatum, Meridion circulare, Navicula pelliculosa, and Achnanthes minutissima (particularly abundant at Station 8). In Yellow Creek, Navicula pelliculosa, Synedra amphicephala, and Surirella ovata were the most abundant periphytic algal taxa, whereas in the White River, Navicula cryptocephala, Navicula viridula, Gomphonema olivaceum, Epithemia sorex, and Nitzschia dissipata were the dominant taxa.

The most abundant periphytic algal taxa collected from artificial substrates were Navicula viridula, Navicula cryptocephala, Navicula tripunctata, Surirella ovata, and Gomphonema spp.

During April 1976, as in April 1975, diatoms were the dominant algal taxa in the periphyton although there were some differences in the species composition of the dominant taxa. In waters of the study area, the periphytic algae generally constitute the major source of primary production with phytoplankton as a secondary source (since the phytoplankton of these waters is generally derived from the periphyton).

2.4.4 - Periphyton Data

APPENDIX F-7-1

ALGAL TAXA OBSERVED IN THE PERIPHYTON DURING
RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX F-7-1

ALGAL TAXA OBSERVED IN THE PERIPHYTON DURING RBOSP AQUATIC BASELINE STUDIES, APRIL 1976.

CYANOPHYTA

- *LYNGBYA* SPP
- *OSCILLATORIA* SPP
- *CALOTHRIX* SPP

CHLOROPHYTA

- *ULOTHRIX* SPP
- *STIGEOCLONIUM* SPP
- *CLADOPHORA* SPP

CHRYSOPHYTA

- *BICOECA LACUSTRIS*
- *CHRYSIDIASTRUM OCELLATUM*
- *THALASSIOSIRA FLUVIATILIS*
- *CYCLOTELLA MENEGHINIANA*
- *STEPHANODISCUS TENUIS*
- *DIATOMA HIEMALE*
- *DIATOMA TENUE*
- *DIATOMA TENUE* VAR. *ELONGATUM*
- *DIATOMA VULGARE*
- *MERIDION CIRCULARE*
- *FRAGILARIA CONSTRUENS*
- *FRAGILARIA CROTONENSIS*
- *FRAGILARIA LEPTOSTAURON*
- *FRAGILARIA PINNATA*

APPENDIX F-7-1 (Continued)

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CHRYSOPHYTA

     FRAGILARIA VAUCHERIAE
     ---------- ----------
     HANNAEA ARCUS
     ------- -----
     SYNEDRA AMPHICEPHALA
     ------- ------------
     SYNEDRA PULCHELLA
     ------- ---------
     SYNEDRA TENERA
     ------- ------
     SYNEDRA ULNA
     ------- ----
     COCCONEIS PEDICULUS
     --------- ---------
     COCCONEIS PLACENTULA
     --------- ----------
     ACHNANTHES LANCEOLATA
     ---------- ----------
     ACHNANTHES MINUTISSIMA
     ---------- -----------
     RHOICOSPHENIA CURVATA
     ------------- -------
     GYROSIGMA ACUMINATUM
     --------- ----------
     PLEUROSIGMA DELICATULUM
     ----------- -----------
     ANOMOEONEIS SPHAEROPHORA
     ----------- ------------
     NAVICULA ARVENSIS
     -------- --------
     NAVICULA CRYPTOCEPHALA
     -------- -------------
     NAVICULA CUSPIDATA
     -------- ---------
     NAVICULA MINIMA
     -------- ------
     NAVICULA MUTICA
     -------- ------
     NAVICULA PELLICULOSA
     -------- -----------
     NAVICULA PUPULA
     -------- ------
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APPENDIX F-7-1 (Continued)

CHRYSOPHYTA

NAVICULA RADIOSA
NAVICULA SALINARUM
NAVICULA SALINARUM VAR. *INTERMEDIA*
NAVICULA SUBHAMULATA
NAVICULA TRIPUNCTATA
NAVICULA VAUCHERIAE
NAVICULA VIRIDULA
NAVICULA SP I
NAVICULA SP 2
NAVICULA SP 4
CALONEIS AMPHISBAENA
CALONEIS BACILLUM
CALONEIS VENTRICOSA
PINNULARIA BOREALIS
PINNULARIA BREBISSONII
PINNULARIA GLOBICEPS
PINNULARIA VIRIDIS
AMPHORA OVALIS VAR. *PEDICULUS*
CYMBELLA AFFINIS
CYMBELLA MEXICANA
CYMBELLA MICROCEPHALA

CHRYSOPHYTA

- CYMBELLA PROSTRATA
- CYMBELLA SINUATA
- CYMBELLA VENTRICOSA
- DIDYMOSPHENIA GEMINATA
- GOMPHONEMA AFFINE
- GOMPHONEMA INTRICATUM
- GOMPHONEMA OLIVACEUM
- GOMPHONEMA PARVULUM
- GOMPHONEMA VENTRICOSUM
- AMPHIPRORA ALATA
- EPITHEMIA SOREX
- EPITHEMIA TURGIDA
- RHOPALODIA GIBBA
- RHOPALODIA GIBBERULA
- CYLINDROTHECA GRACILIS
- HANTZSCHIA AMPHIOXYS
- NITZSCHIA ACICULARIS
- NITZSCHIA APICULATA
- NITZSCHIA CAPITELLATA
- NITZSCHIA CHASEI
- NITZSCHIA DENTICULA

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CHRYSOPHYTA

     NITZSCHIA DISSIPATA
     --------- ---------
     NITZSCHIA FRUSTULUM
     --------- ---------
     NITZSCHIA HOLSATICA
     --------- ---------
     NITZSCHIA HUNGARICA
     --------- ---------
     NITZSCHIA IGNORATA
     --------- --------
     NITZSCHIA LATENS
     --------- ------
     NITZSCHIA LINEARIS
     --------- --------
     NITZSCHIA MICROCEPHALA
     --------- ------------
     NITZSCHIA PALEA
     --------- -----
     NITZSCHIA SIGMOIDEA
     --------- ---------
     NITZSCHIA VERMICULARIS
     --------- ------------
     CYMATOPLEURA SOLEA
     ------------ -----
     SURIRELLA OVATA
     --------- -----
     SURIRELLA OVALIS
     --------- ------
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APPENDIX F-7-2

DENSITIES OF ALGAL TAXA OBSERVED IN THE PERIPHYTON DURING RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX [illegible]-2

DENSITIES OF ALGAL TAXA OBSERVED IN THE PERIPHYTON DURING RBOSP AQUATIC BASELINE STUDIES, APRIL 1976.[1]

(Site = Station; Rep = Replicate)

SITE = 2

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
BICOECA LACUSTRIS	717.00	3577.00	729.00	1674.33
SYNEDRA AMPHICEPHALA	2.00			.67
ACHNANTHES LANCEOLATA		9.00	3.00	4.00
ACHNANTHES MINUTISSIMA	90.00	454.00	46.00	196.67
NAVICULA ARVENSIS	2.00		7.00	3.00
NAVICULA CRYPTOCEPHALA	6.00		15.00	7.00
NAVICULA PELLICULOSA	4.00			1.33
NAVICULA VIRIDULA	9.00	4.00		4.33
NAVICULA SP 1		4.00		1.33
CALONEIS BACILLUM		4.00		1.33
AMPHORA OVALIS VAR. PEDICULUS	2.00			.67
CYMBELLA MICROCEPHALA		4.00		1.33
CYMBELLA VENTRICOSA	2.00			.67
GOMPHONEMA INTRICATUM	4.00		2.00	2.00
GOMPHONEMA OLIVACEUM		4.00		1.33
EPITHEMIA SOREX	6.00			2.00
HANTZSCHIA AMPHIOXYS	2.00			.67
NITZSCHIA CHASEI	4.00			1.33
NITZSCHIA FRUSTULUM			3.00	1.00
NITZSCHIA HOLSATICA	4.00			1.33
GROUP MEAN				1906.33

[1] Stations 1, 6, 10 - 12, and 16 were dry or inaccessible at the time of sampling.

APPENDIX F-7-2 (Continued)

SITE = 2

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NITZSCHIA LINEARIS			.50	.17
NITZSCHIA PALEA	2.00			.67
SURIRELLA OVALIS			.03	.01
GROUP MEAN				.84

APPENDIX F-7-2 (Continued)

SITE = 3

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
ACHNANTHES MINUTISSIMA	13.00	12.00	9.00	11.33
ANOMOEONEIS SPHAEROPHORA			4.00	1.33
NAVICULA ARVENSIS	45.00	2.00	4.00	17.00
NAVICULA CRYPTOCEPHALA	18.00	12.00	13.00	14.33
NAVICULA PELLICULOSA	1107.00	335.00	724.00	722.00
NAVICULA VIRIDULA			4.00	1.33
NAVICULA SP 1			13.00	4.33
NAVICULA SP 2	9.00	2.00	36.00	15.67
PINNULARIA BREBISSONII			4.00	1.33
AMPHORA OVALIS VAR. PEDICULUS		3.00		1.00
GOMPHONEMA INTRICATUM	13.00	7.00	36.00	18.67
NITZSCHIA CAPITELLATA	18.00	2.00	18.00	12.67
NITZSCHIA DISSIPATA	4.00			1.33
NITZSCHIA FRUSTULUM	27.00	3.00	49.00	26.33
NITZSCHIA HOLSATICA	4.00	3.00	4.00	3.67
NITZSCHIA LINEARIS	.36	.15	4.00	1.50
NITZSCHIA PALEA	9.00			3.00
SURIRELLA OVALIS			9.00	3.00
GROUP MEAN				859.84

APPENDIX F-7-2 (Continued)

SITE = 4

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
BICOECA LACUSTRIS	46.00	614.00	525.00	395.00
CHRYSIDIASTRUM OCELLATUM			3.00	1.00
DIATOMA VULGARE	1.00			.33
MERIDION CIRCULARE		2.00		.67
FRAGILARIA VAUCHERIAE			2.00	.67
ACHNANTHES LANCEOLATA	8.00	10.00	7.00	8.33
ACHNANTHES MINUTISSIMA	33.00	36.00	22.00	30.33
GYROSIGMA ACUMINATUM	1.00		.05	.35
NAVICULA ARVENSIS	2.00	2.00	2.00	2.00
NAVICULA CRYPTOCEPHALA	7.00	17.00	17.00	13.67
NAVICULA PELLICULOSA	4.00	3.00	15.00	7.33
NAVICULA SALINARUM VAR. INTERMEDIA	1.00			.33
NAVICULA SP 1	3.00	2.00	2.00	2.33
NAVICULA SP 2	2.00			.67
CYMBELLA AFFINIS	1.00			.33
GOMPHONEMA INTRICATUM	12.00	7.00	3.00	7.33
RHOPALODIA GIBBERULA	2.00			.67
NITZSCHIA FRUSTULUM	4.00	4.00	2.00	3.33
NITZSCHIA LATENS	2.00	2.00	10.00	4.67
NITZSCHIA LINEARIS	7.00	3.00	2.00	4.00
GROUP MEAN				483.35

APPENDIX F-7-2 (Continued)

SITE = 4

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
SURIRELLA OVATA	3.00			1.00
SURIRELLA OVALIS		2.00	2.00	1.33
GROUP MEAN				2.33

APPENDIX F-7-2 (Continued)

SITE = 5

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
CALOTHRIX SPP	14.00			4.67
GROUP MEAN				4.67
CHRYSOPHYTA				
DIATOMA TENUE VAR. ELONGATUM	14.00			4.67
MERIDION CIRCULARE		88.00	17.00	35.00
FRAGILARIA CONSTRUENS			17.00	5.67
FRAGILARIA VAUCHERIAE		22.00	136.00	52.67
SYNEDRA AMPHICEPHALA	84.00	176.00	17.00	92.33
SYNEDRA TENERA	14.00			4.67
COCCONEIS PLACENTULA	4.00	22.00		8.67
ACHNANTHES LANCEOLATA	14.00	176.00	85.00	91.67
ACHNANTHES MINUTISSIMA	6594.00	1012.00	153.00	2586.33
RHOICOSPHENIA CURVATA			34.00	11.33
GYROSIGMA ACUMINATUM		.20	.15	.12
PLEUROSIGMA DELICATULUM	.12			.04
NAVICULA ARVENSIS	196.00		17.00	71.00
NAVICULA CRYPTOCEPHALA	182.00	396.00	221.00	266.33
NAVICULA GREGARIA			17.00	5.67
NAVICULA PELLICULOSA	322.00	44.00	68.00	144.67
GROUP MEAN				3380.82

APPENDIX F-7-2 (Continued)

SITE = 5

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NAVICULA PUPULA		22.00		7.33
NAVICULA RADIOSA			17.00	5.67
NAVICULA SALINARUM VAR. INTERMEDIA		22.00		7.33
NAVICULA VAUCHERIAE			17.00	5.67
NAVICULA VIRIDULA		22.00	17.00	13.00
NAVICULA SP I	28.00	22.00		16.67
PINNULARIA BREBISSONII	14.00			4.67
PINNULARIA VIRIDIS	.12			.04
CYMBELLA AFFINIS	14.00	22.00		12.00
CYMBELLA MICROCEPHALA	56.00			18.67
CYMBELLA VENTRICOSA	28.00	22.00	17.00	22.33
GOMPHONEMA INTRICATUM	1834.00	8624.00	5474.00	5310.67
GOMPHONEMA OLIVACEUM	14.00			4.67
EPITHEMIA SOREX			17.00	5.67
NITZSCHIA ACICULARIS	28.00			9.33
NITZSCHIA CAPITELLATA	140.00	66.00	34.00	80.00
NITZSCHIA CHASEI	14.00			4.67
NITZSCHIA DISSIPATA		22.00		7.33
NITZSCHIA FRUSTULUM	168.00	22.00	17.00	69.00
NITZSCHIA HOLSATICA	14.00	22.00	51.00	29.00
GROUP MEAN				5633.71

APPENDIX F-7-2 (Continued)

SITE = 5

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NITZSCHIA LINEARIS	.96	.20	2.20	1.12
NITZSCHIA PALEA	42.00	22.00		21.33
NITZSCHIA VERMICULARIS	.12		.15	.09
SURIRELLA OVATA	252.00	1716.00	612.00	860.00
SURIRELLA OVALIS			.15	.05
GROUP MEAN				882.59

APPENDIX F-7-2 (Continued)

SITE = 7

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
BICOECA LACUSTRIS			3.00	1.00
CHRYSIDIASTRUM OCELLATUM			31.00	10.33
SYNEDRA AMPHICEPHALA	1.00		2.00	1.00
ACHNANTHES LANCEOLATA			2.00	.67
ACHNANTHES MINUTISSIMA	37.00	31.00	8.00	25.33
NAVICULA ARVENSIS	1.00	6.00		2.33
NAVICULA CRYPTOCEPHALA	14.00	1.00	2.00	5.67
NAVICULA PELLICULOSA	36.00	54.00	27.00	39.00
NAVICULA SP 1		1.00		.33
NAVICULA SP 2	1.00	1.00		.67
AMPHORA OVALIS VAR. PEDICULUS	1.00			.33
GOMPHONEMA INTRICATUM	10.00	6.00		5.33
RHOPALODIA GIBBA	1.00			.33
NITZSCHIA CAPITELLATA	2.00			.67
NITZSCHIA DENTICULA	1.00			.33
NITZSCHIA FRUSTULUM	3.00		7.00	3.33
NITZSCHIA HOLSATICA		1.00		.33
NITZSCHIA LINEARIS	8.00	6.00	.80	4.93
NITZSCHIA PALEA		1.00		.33
GROUP MEAN				102.27

APPENDIX F-7-2 (Continued)

SITE = 6

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
CALOTHRIX SPP	2310.00			770.00
GROUP MEAN				770.00
CHRYSOPHYTA				
BICOECA LACUSTRIS	9380.00	1326.00	9588.00	6764.67
MERIDION CIRCULARE	21.00		68.00	29.67
SYNEDRA AMPHICEPHALA	7.00			2.33
ACHNANTHES LANCEOLATA	266.00	476.00	272.00	338.00
ACHNANTHES MINUTISSIMA	1953.00	4658.00	89896.00	32169.00
NAVICULA ARVENSIS	203.00		204.00	135.67
NAVICULA CRYPTOCEPHALA	42.00	51.00		31.00
NAVICULA PELLICULOSA	812.00	2720.00	2448.00	1993.33
NAVICULA VIRIDULA	7.00			2.33
NAVICULA SP 1		17.00		5.67
CALONEIS BACILLUM		17.00		5.67
GOMPHONEMA INTRICATUM	700.00	1530.00	3536.00	1922.00
GOMPHONEMA OLIVACEUM		17.00		5.67
NITZSCHIA CAPITELLATA	35.00			11.67
NITZSCHIA DISSIPATA	28.00		68.00	32.00
NITZSCHIA FRUSTULUM	266.00	51.00	136.00	151.00
GROUP MEAN				43599.67

APPENDIX F-7-2 (Continued)

SITE = 8

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NITZSCHIA HOLSATICA	21.00		68.00	29.67
NITZSCHIA LINEARIS	.18		2.40	.86
SURIRELLA OVATA	7.00			2.33
GROUP MEAN				32.86

APPENDIX F-7-2 (Continued)

SITE = 9

TAXON	REP A	REP B	REP C	MEAN
CHLOROPHYTA				
CLADOPHORA SPP		13.00		4.33
GROUP MEAN				4.33
CHRYSOPHYTA				
DIATOMA VULGARE		168.00		56.00
MERIDION CIRCULARE	4.00		1.00	1.67
SYNEDRA AMPHICEPHALA	6.00		1.00	2.33
ACHNANTHES LANCEOLATA	6.00	14.00	4.00	8.00
ACHNANTHES MINUTISSIMA	70.00	350.00	31.00	150.33
RHOICOSPHENIA CURVATA		252.00	1.00	84.33
GYROSIGMA ACUMINATUM	.12		.02	.05
NAVICULA ARVENSIS	9.00			3.00
NAVICULA CRYPTOCEPHALA	28.00	140.00	15.00	61.00
NAVICULA CUSPIDATA			.01	.00
NAVICULA MUTICA	2.00			.67
NAVICULA PELLICULOSA	182.00	252.00	1.00	145.00
NAVICULA SALINARUM VAR. INTERMEDIA		70.00		23.33
NAVICULA VIRIDULA	2.00	280.00	10.00	97.33
NAVICULA SP 1	2.00	14.00		5.33
NAVICULA SP 2	4.00			1.33
GROUP MEAN				639.72

APPENDIX F-7-2 (Continued)

SITE = 9

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
AMPHORA OVALIS VAR. PEDICULUS		14.00		4.67
GOMPHONEMA INTRICATUM	11.00	154.00	12.00	59.00
GOMPHONEMA OLIVACEUM		70.00	3.00	24.33
HANTZSCHIA AMPHIOXYS			1.00	.33
NITZSCHIA CAPITELLATA	2.00			.67
NITZSCHIA DISSIPATA		42.00		14.00
NITZSCHIA FRUSTULUM	18.00		1.00	6.33
NITZSCHIA LINEARIS	18.00	28.00	14.00	20.00
NITZSCHIA PALEA	1.00		1.00	.67
SURIRELLA OVATA	2.00			.67
SURIRELLA OVALIS	2.00		.03	.68
GROUP MEAN				131.34

APPENDIX F-7-2 (Continued)

SITE = 13

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
BICOECA LACUSTRIS			1892.00	630.67
DIATOMA VULGARE			22.00	7.33
MERIDION CIRCULARE	1341.00	8160.00	220.00	3240.33
FRAGILARIA CONSTRUENS	27.00			9.00
FRAGILARIA VAUCHERIAE	189.00	272.00	110.00	190.33
SYNEDRA AMPHICEPHALA	9.00	272.00		93.67
ACHNANTHES LANCEOLATA	288.00	1428.00	550.00	755.33
ACHNANTHES MINUTISSIMA	5076.00	19992.00	19228.00	14765.33
NAVICULA ARVENSIS	225.00	2108.00	242.00	858.33
NAVICULA CRYPTOCEPHALA	531.00	4964.00	748.00	2081.00
NAVICULA MINIMA	36.00			12.00
NAVICULA PELLICULOSA	3888.00	41208.00	594.00	15230.00
NAVICULA VIRIDULA	9.00	68.00	44.00	40.33
NAVICULA SP 1	9.00	68.00	22.00	33.00
NAVICULA SP 2			44.00	14.67
PINNULARIA GLOBICEPS	9.00	68.00		25.67
CYMBELLA VENTRICOSA		136.00		45.33
GOMPHONEMA INTRICATUM	5814.00	26724.00	6248.00	12928.67
GOMPHONEMA OLIVACEUM		204.00		68.00
NITZSCHIA ACICULARIS	9.00	68.00		25.67
GROUP MEAN				51054.67

APPENDIX F-7-2 (Continued)

SITE = 13

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NITZSCHIA CAPITELLATA	81.00	2856.00	88.00	1008.33
NITZSCHIA DISSIPATA	9.00		44.00	17.67
NITZSCHIA FRUSTULUM	72.00	204.00	264.00	180.00
NITZSCHIA HOLSATICA	135.00	748.00	22.00	301.67
NITZSCHIA LINEARIS	9.00	18.60	22.00	16.53
NITZSCHIA PALEA	27.00			9.00
SURIRELLA OVATA	90.00	748.00	22.00	286.67
GROUP MEAN				1819.87

APPENDIX F-7-2 (Continued)

SITE = 14

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
BICOECA LACUSTRIS	2286.00	5931.00	2196.00	3471.00
CYCLOTELLA MENEGHINIANA	18.00	9.00	135.00	54.00
MERIDION CIRCULARE	36.00		27.00	21.00
FRAGILARIA CONSTRUENS	27.00			9.00
FRAGILARIA VAUCHERIAE	18.00			6.00
SYNEDRA AMPHICEPHALA	36.00	27.00	72.00	45.00
SYNEDRA ULNA		.08	.32	.13
ACHNANTHES LANCEOLATA	135.00	63.00	99.00	99.00
ACHNANTHES MINUTISSIMA	621.00	504.00	594.00	573.00
GYROSIGMA ACUMINATUM			.32	.11
NAVICULA ARVENSIS	153.00	315.00	63.00	177.00
NAVICULA CRYPTOCEPHALA	522.00	99.00	396.00	339.00
NAVICULA CUSPIDATA	.16	.08	.08	.11
NAVICULA MINIMA	9.00			3.00
NAVICULA MUTICA		9.00		3.00
NAVICULA PELLICULOSA	981.00	711.00	1179.00	957.00
NAVICULA VIRIDULA	18.00	9.00		9.00
NAVICULA SP 1	90.00	63.00	36.00	63.00
NAVICULA SP 2	9.00		18.00	9.00
AMPHORA OVALIS VAR. PEDICULUS		9.00		3.00
GROUP MEAN				5841.35

APPENDIX F-7-2 (Continued)

SITE = 14

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CYMBELLA AFFINIS	18.00			6.00
CYMBELLA MICROCEPHALA		9.00		3.00
CYMBELLA VENTRICOSA		18.00		6.00
GOMPHONEMA INTRICATUM	477.00	63.00		180.00
NITZSCHIA CAPITELLATA	153.00	63.00	666.00	294.00
NITZSCHIA DENTICULA	27.00	9.00	45.00	27.00
NITZSCHIA FRUSTULUM	99.00	9.00	36.00	48.00
NITZSCHIA HOLSATICA	72.00	63.00	63.00	66.00
NITZSCHIA LATENS			27.00	9.00
NITZSCHIA LINEARIS	9.00	2.10	9.00	6.70
NITZSCHIA PALEA	27.00	36.00	18.00	27.00
SURIRELLA OVATA		63.00	9.00	24.00
GROUP MEAN				696.70

APPENDIX F-7-2 (Continued)

SITE = 15

TAXON	REP A	REP B	REP C	MEAN
CHLOROPHYTA				
CLADOPHORA SPP	1.50			.50
GROUP MEAN				.50
CHRYSOPHYTA				
CYCLOTELLA MENEGHINIANA	17.00	17.00		11.33
SYNEDRA AMPHICEPHALA	17.00	34.00		17.00
ACHNANTHES LANCEOLATA	17.00	17.00		11.33
ACHNANTHES MINUTISSIMA	17.00	17.00		11.33
GYROSIGMA ACUMINATUM		.70		.23
NAVICULA ARVENSIS	153.00	119.00		90.67
NAVICULA CRYPTOCEPHALA	34.00	153.00		62.33
NAVICULA PELLICULOSA	18649.00	23902.00	14450.00	19000.33
NAVICULA VIRIDULA			34.00	11.33
NAVICULA SP 1			34.00	11.33
NAVICULA SP 2		17.00		5.67
PINNULARIA GLOBICEPS	17.00			5.67
GOMPHONEMA INTRICATUM	85.00	221.00		102.00
NITZSCHIA CAPITELLATA	51.00			17.00
NITZSCHIA DENTICULA	17.00			5.67
NITZSCHIA FRUSTULUM	85.00	17.00		34.00
GROUP MEAN				19397.23

APPENDIX F-7-2 (Continued)

SITE = 15

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NITZSCHIA HOLSATICA		136.00		45.33
NITZSCHIA LINEARIS	1.60	1.00	.30	.97
NITZSCHIA PALEA	68.00	102.00		56.67
GROUP MEAN				102.97

APPENDIX F-7-2 (Continued)

SITE = 17

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
MERIDION CIRCULARE	10.00			3.33
SYNEDRA AMPHICEPHALA	32.00	14.00	2.00	16.00
SYNEDRA TENERA	3.00			1.00
ACHNANTHES LANCEOLATA	3.00			1.00
ACHNANTHES MINUTISSIMA		5.00	4.00	3.00
NAVICULA ARVENSIS		5.00		1.67
NAVICULA CRYPTOCEPHALA	16.00		4.00	6.67
NAVICULA PELLICULOSA	173.00	379.00	77.00	209.67
NAVICULA TRIPUNCTATA			2.00	.67
NAVICULA VIRIDULA			2.00	.67
NAVICULA SP 2	3.00	5.00		2.67
GOMPHONEMA INTRICATUM	10.00	5.00	6.00	7.00
EPITHEMIA SOREX			2.00	.67
HANTZSCHIA AMPHIOXYS	3.00			1.00
NITZSCHIA CAPITELLATA		5.00		1.67
NITZSCHIA FRUSTULUM	16.00	5.00		7.00
NITZSCHIA HOLSATICA		14.00		4.67
NITZSCHIA PALEA	3.00			1.00
SURIRELLA OVATA		5.00		1.67
GROUP MEAN				271.00

APPENDIX F-7-2 (Continued)

SITE = 18

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
DIATOMA VULGARE	34.00			11.33
MERIDION CIRCULARE			14.00	4.67
FRAGILARIA VAUCHERIAE			14.00	4.67
ACHNANTHES LANCEOLATA	34.00	136.00	28.00	66.00
ACHNANTHES MINUTISSIMA			70.00	23.33
NAVICULA ARVENSIS		544.00	70.00	204.67
NAVICULA CRYPTOCEPHALA	306.00	408.00	42.00	252.00
NAVICULA PELLICULOSA	4726.00	99999.00	1946.00	35557.00
NAVICULA PUPULA	17.00			5.67
NAVICULA SALINARUM VAR. INTERMEDIA	136.00			45.33
NAVICULA TRIPUNCTATA			14.00	4.67
NAVICULA VIRIDULA	68.00		28.00	32.00
NAVICULA SP 1		340.00		113.33
NAVICULA SP 2	17.00	204.00	14.00	78.33
CYMBELLA MICROCEPHALA	17.00	68.00		28.33
GOMPHONEMA INTRICATUM		1020.00	28.00	349.33
NITZSCHIA ACICULARIS	17.00			5.67
NITZSCHIA CAPITELLATA		340.00	84.00	141.33
NITZSCHIA DISSIPATA	102.00		14.00	38.67
NITZSCHIA FRUSTULUM		68.00		22.67
GROUP MEAN				36989.00

APPENDIX F-7-2 (Continued)

SITE = 18

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NITZSCHIA HOLSATICA		1700.00	28.00	576.00
NITZSCHIA LINEARIS			.60	.20
NITZSCHIA PALEA	255.00	748.00		334.33
SURIRELLA OVATA	17.00			5.67
GROUP MEAN				916.20

APPENDIX F-7-2 (continued)

SITE = 19

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
FRAGILARIA VAUCHERIAE		56.00		18.67
SYNEDRA AMPHICEPHALA	36.00	490.00	157.00	227.67
SYNEDRA ULNA	3.00	14.00	11.00	9.33
ACHNANTHES LANCEOLATA		28.00		9.33
ACHNANTHES MINUTISSIMA	10.00	308.00	78.00	132.00
RHOICOSPHENIA CURVATA		56.00		18.67
GYROSIGMA ACUMINATUM	.03		1.50	.51
PLEUROSIGMA DELICATULUM	.06		.80	.29
NAVICULA ARVENSIS	3.00	70.00	33.00	35.33
NAVICULA CRYPTOCEPHALA	20.00	490.00	470.00	326.67
NAVICULA GREGARIA		14.00		4.67
NAVICULA PELLICULOSA	162.00	3318.00	381.00	1287.00
NAVICULA VIRIDULA		14.00	11.00	8.33
NAVICULA SP 1		56.00	78.00	44.67
NAVICULA SP 2	3.00	14.00	11.00	9.33
AMPHORA OVALIS VAR. PEDICULUS		14.00		4.67
GOMPHONEMA INTRICATUM		14.00	11.00	8.33
GOMPHONEMA OLIVACEUM		378.00		126.00
GOMPHONEMA PARVULUM	3.00			1.00
AMPHIPRORA ALATA			11.00	3.67
GROUP MEAN				2276.13

APPENDIX F-7-2 (Continued)

SITE = 19

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
EPITHEMIA SOREX		14.00	22.00	12.00
EPITHEMIA TURGIDA	.06			.02
RHOPALODIA GIBBA		.72		.24
RHOPALODIA GIBBERULA		28.00	67.00	31.67
NITZSCHIA ACICULARIS		14.00		4.67
NITZSCHIA CAPITELLATA	3.00	98.00	89.00	63.33
NITZSCHIA CHASEI	6.00	14.00		6.67
NITZSCHIA DISSIPATA	3.00	28.00		10.33
NITZSCHIA FRUSTULUM	96.00	462.00	481.00	346.33
NITZSCHIA HOLSATICA		672.00	437.00	369.67
NITZSCHIA LINEARIS			11.00	3.67
NITZSCHIA PALEA	82.00	238.00	22.00	114.00
SURIRELLA OVATA	33.00	504.00		179.00
GROUP MEAN				1141.59

APPENDIX F-7-2 (Continued)

SITE = 20

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
MERIDION CIRCULARE		9.00		3.00
FRAGILARIA VAUCHERIAE	63.00	54.00	28.00	48.33
SYNEDRA AMPHICEPHALA	1791.00	937.00	1323.00	1350.33
SYNEDRA PULCHELLA	27.00	27.00	21.00	25.00
ACHNANTHES LANCEOLATA		18.00		6.00
ACHNANTHES MINUTISSIMA		18.00		6.00
RHOICOSPHENIA CURVATA			7.00	2.33
NAVICULA ARVENSIS		9.00	7.00	5.33
NAVICULA CRYPTOCEPHALA	45.00	54.00	7.00	35.33
NAVICULA PELLICULOSA	1179.00	1206.00	1617.00	1334.00
NAVICULA PUPULA		9.00		3.00
NAVICULA VIRIDULA			7.00	2.33
NAVICULA SP 1		9.00		3.00
NAVICULA SP 2			21.00	7.00
CALONEIS AMPHISBAENA		.08		.03
AMPHORA OVALIS VAR. PEDICULUS		18.00	14.00	10.67
GOMPHONEMA INTRICATUM		27.00		9.00
NITZSCHIA CAPITELLATA	72.00	324.00	175.00	190.33
NITZSCHIA FRUSTULUM		18.00	35.00	17.67
NITZSCHIA HOLSATICA		108.00	133.00	80.33
GROUP MEAN				3139.03

APPENDIX F-7-2 (Continued)

SITE = 20

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NITZSCHIA LATENS			70.00	23.33
NITZSCHIA LINEARIS			.18	.06
NITZSCHIA MICROCEPHALA		9.00	7.00	5.33
NITZSCHIA PALEA	216.00	36.00		84.00
SURIRELLA OVATA	693.00	2034.00	378.00	1035.00
GROUP MEAN				1147.73

APPENDIX F-7-2 (Continued)

SITE = 21

TAXON	REP A	REP B	REP C	MEAN
CHLOROPHYTA				
ULOTHRIX SPP	9.00			3.00
GROUP MEAN				3.00
CHRYSOPHYTA				
FRAGILARIA VAUCHERIAE	144.00	147.00	63.00	118.00
SYNEDRA AMPHICEPHALA	1908.00	917.00	623.00	1149.33
SYNEDRA PULCHELLA	18.00	28.00	56.00	34.00
ACHNANTHES MINUTISSIMA	342.00			114.00
NAVICULA CRYPTOCEPHALA	9.00	35.00	35.00	26.33
NAVICULA PELLICULOSA	297.00	770.00	574.00	547.00
NAVICULA SALINARUM	9.00			3.00
NAVICULA SALINARUM VAR. *INTERMEDIA*		7.00		2.33
NAVICULA TRIPUNCTATA	9.00			3.00
NAVICULA VIRIDULA		7.00	14.00	7.00
NAVICULA SP 1		7.00		2.33
NAVICULA SP 2		7.00		2.33
AMPHORA OVALIS VAR. *PEDICULUS*			14.00	4.67
GUMPHONEMA INTRICATUM		7.00	7.00	4.67
AMPHIPRORA ALATA			7.00	2.33
EPITHEMIA SOREX			7.00	2.33
GROUP MEAN				2022.67

APPENDIX F-7-2 (Continued)

SITE = 21

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NITZSCHIA ACICULARIS	9.00	7.00		5.33
NITZSCHIA APICULATA			14.00	4.67
NITZSCHIA CAPITELLATA	387.00	175.00	287.00	283.00
NITZSCHIA FRUSTULUM	18.00	14.00	21.00	17.67
NITZSCHIA HOLSATICA	108.00	182.00	119.00	136.33
NITZSCHIA LINEARIS		.16	7.00	2.39
NITZSCHIA PALEA		35.00		11.67
SURIRELLA OVATA	1314.00	455.00	2058.00	1275.67
GROUP MEAN				1736.72

APPENDIX F-7-2 (Continued)

SITE = 22

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
FRAGILARIA VAUCHERIAE	136.00	289.00		141.67
SYNEDRA AMPHICEPHALA	816.00	1139.00	164.00	706.33
SYNEDRA PULCHELLA	51.00		22.00	24.33
COCCONEIS PEDICULUS	17.00			5.67
ACHNANTHES LANCEOLATA		34.00		11.33
ACHNANTHES MINUTISSIMA	17.00		22.00	13.00
GYROSIGMA ACUMINATUM		.15		.05
PLEUROSIGMA DELICATULUM		.15		.05
NAVICULA ARVENSIS		17.00	44.00	20.33
NAVICULA CRYPTOCEPHALA	51.00	153.00	22.00	75.33
NAVICULA PELLICULOSA	510.00	1190.00	1826.00	1175.33
NAVICULA PUPULA	17.00			5.67
NAVICULA VIRIDULA	102.00		22.00	41.33
NAVICULA SP 2		17.00		5.67
GOMPHONEMA INTRICATUM		17.00	22.00	13.00
GOMPHONEMA OLIVACEUM	17.00			5.67
AMPHIPRORA ALATA	17.00			5.67
RHOPALODIA GIBBA	17.00			5.67
NITZSCHIA ACICULARIS		17.00		5.67
NITZSCHIA APICULATA		17.00		5.67
GROUP MEAN				2267.43

APPENDIX F-7-2 (Continued)

SITE = 22

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NITZSCHIA CAPITELLATA	391.00	901.00	286.00	526.00
NITZSCHIA DISSIPATA	17.00			5.67
NITZSCHIA FRUSTULUM		51.00	22.00	24.33
NITZSCHIA HOLSATICA		867.00	264.00	377.00
NITZSCHIA LINEARIS			.20	.07
NITZSCHIA PALEA	187.00			62.33
SURIRELLA OVATA	1224.00	2992.00	836.00	1684.00
SURIRELLA OVALIS	.15	17.00		5.72
GROUP MEAN				2685.12

APPENDIX F-7-2 (Continued)

SITE = 23

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
CALOTHRIX SPP			204.00	68.00
GROUP MEAN				68.00
CHRYSOPHYTA				
DIATOMA HIEMALE		68.00		22.67
FRAGILARIA LEPTOSTAURON		136.00		45.33
FRAGILARIA VAUCHERIAE	204.00	272.00	68.00	181.33
SYNEDRA ULNA	.60			.20
ACHNANTHES LANCEOLATA			34.00	11.33
ACHNANTHES MINUTISSIMA	68.00		136.00	68.00
GYROSIGMA ACUMINATUM		.60		.20
NAVICULA ARVENSIS		68.00		22.67
NAVICULA CRYPTOCEPHALA	1088.00	1156.00	884.00	1042.67
NAVICULA MUTICA	68.00			22.67
NAVICULA PELLICULOSA	136.00	68.00		68.00
NAVICULA SALINARUM VAR. INTERMEDIA	68.00	68.00		45.33
NAVICULA TRIPUNCTATA	816.00	1428.00	952.00	1065.33
NAVICULA VIRIDULA	10336.00	7956.00	5644.00	7978.67
CALONEIS AMPHISBAENA		1.20	.30	.50
CALONEIS BACILLUM			34.00	11.33
GROUP MEAN				10586.23

APPENDIX F-7-2 (Continued)

SITE = 23

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
AMPHORA OVALIS VAR. PEDICULUS	136.00	204.00	238.00	192.67
CYMBELLA AFFINIS	68.00	68.00	68.00	68.00
CYMBELLA VENTRICOSA	476.00	136.00	204.00	272.00
GOMPHONEMA OLIVACEUM	884.00	1020.00	1156.00	1020.00
GOMPHONEMA VENTRICOSUM			34.00	11.33
EPITHEMIA SOREX	136.00	4080.00	2992.00	2402.67
RHOPALODIA GIBBA		.60	1.50	.70
NITZSCHIA CAPITELLATA			102.00	34.00
NITZSCHIA CHASEI			34.00	11.33
NITZSCHIA DISSIPATA	408.00	2176.00	986.00	1190.00
NITZSCHIA FRUSTULUM	136.00	340.00	238.00	238.00
NITZSCHIA SIGMOIDEA			.30	.10
SURIRELLA OVATA	476.00	68.00	102.00	215.33
GROUP MEAN				5656.13

APPENDIX F-7-2 (Continued)

SITE = 24

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
LYNGBYA SPP			66.00	22.00
CALOTHRIX SPP		34.00		11.33
GROUP MEAN				33.33
CHRYSOPHYTA				
DIATOMA VULGARE	68.00	34.00		34.00
FRAGILARIA PINNATA	340.00	34.00		124.67
FRAGILARIA VAUCHERIAE	136.00	102.00	132.00	123.33
COCCONEIS PEDICULUS	68.00			22.67
COCCONEIS PLACENTULA	68.00		22.00	30.00
ACHNANTHES MINUTISSIMA	408.00		22.00	143.33
GYROSIGMA ACUMINATUM	1.20			.40
NAVICULA CRYPTOCEPHALA	1428.00	1190.00	748.00	1122.00
NAVICULA MINIMA	272.00		22.00	98.00
NAVICULA MUTICA			22.00	7.33
NAVICULA PELLICULOSA	68.00		44.00	37.33
NAVICULA SALINARUM VAR. INTERMEDIA	204.00	34.00	44.00	94.00
NAVICULA TRIPUNCTATA	476.00	238.00	396.00	370.00
NAVICULA VIRIDULA	5780.00	2074.00	2882.00	3578.67
CALONEIS AMPHISBAENA	68.00		.20	22.73
GROUP MEAN				5808.47

APPENDIX F-7-2 (Continued)

SITE = 24

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CALONEIS BACILLUM	68.00	34.00	22.00	41.33
AMPHORA OVALIS VAR. PEDICULUS	952.00	442.00	550.00	648.00
CYMBELLA AFFINIS	68.00			22.67
CYMBELLA SINUATA	136.00	68.00	44.00	82.67
CYMBELLA VENTRICOSA	68.00	102.00	88.00	86.00
GOMPHONEMA OLIVACEUM	952.00	238.00	1100.00	763.33
GOMPHONEMA VENTRICOSUM	68.00			22.67
EPITHEMIA SOREX	2288.00	1224.00	198.00	1236.67
RHOPALODIA GIBBA	.60	.30		.30
NITZSCHIA CHASEI	68.00	272.00	88.00	142.67
NITZSCHIA DISSIPATA	1428.00	1394.00	968.00	1263.33
NITZSCHIA FRUSTULUM		102.00	44.00	48.67
NITZSCHIA SIGMOIDEA	1.80			.60
CYMATOPLEURA SOLEA		.30		.10
SURIRELLA OVATA			22.00	7.33
GROUP MEAN				4366.33

APPENDIX F-7-2 (Continued)

SITE = 25

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
CALOTHRIX SPP	612.00		134.00	248.67
GROUP MEAN				248.67
CHLOROPHYTA				
CLADOPHORA SPP			5.10	1.70
GROUP MEAN				1.70
CHRYSOPHYTA				
FRAGILARIA VAUCHERIAE	136.00	34.00		56.67
COCCONEIS PLACENTULA			102.00	34.00
ACHNANTHES MINUTISSIMA		34.00		11.33
GYROSIGMA ACUMINATUM			34.00	11.33
NAVICULA CRYPTOCEPHALA	2448.00	782.00	1768.00	1666.00
NAVICULA TRIPUNCTATA	884.00	442.00	646.00	657.33
NAVICULA VIRIDULA	3876.00	2788.00	3910.00	3524.67
CALONEIS AMPHISBAENA			.90	.30
CALONEIS BACILLUM	68.00			22.67
AMPHORA OVALIS VAR. PEDICULUS	544.00	170.00	714.00	476.00
CYMBELLA AFFINIS	136.00	34.00	102.00	90.67
CYMBELLA SINUATA	204.00			68.00
GROUP MEAN				6618.97

APPENDIX F-7-2 (Continued)

SITE = 25

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CYMBELLA VENTRICOSA	136.00		102.00	79.33
GOMPHONEMA OLIVACEUM	544.00	918.00	238.00	566.67
EPITHEMIA SOREX	7480.00	102.00	2142.00	3241.33
RHOPALODIA GIBBA	3.00		3.60	2.20
NITZSCHIA CHASEI	1292.00	68.00	170.00	510.00
NITZSCHIA DISSIPATA	2040.00	578.00	986.00	1201.33
NITZSCHIA FRUSTULUM	272.00	102.00	68.00	147.33
NITZSCHIA LINEARIS		.30		.10
CYMATOPLEURA SOLEA	.60			.20
GROUP MEAN				5748.50

APPENDIX F-7-2 (Continued)

SITE = 26

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
CALOTHRIX SPP	952.00	544.00	170.00	555.33
GROUP MEAN				555.33
CHLOROPHYTA				
CLADOPHORA SPP	13.20	68.00	12.00	31.07
GROUP MEAN				31.07
CHRYSOPHYTA				
FRAGILARIA LEPTOSTAURON			136.00	45.33
FRAGILARIA PINNATA		272.00		90.67
FRAGILARIA VAUCHERIAE	272.00		68.00	113.33
COCCONEIS PEDICULUS		136.00		45.33
ACHNANTHES LANCEOLATA	136.00		34.00	56.67
ACHNANTHES MINUTISSIMA		136.00	34.00	56.67
GYROSIGMA ACUMINATUM	2.40		.90	1.10
NAVICULA CRYPTOCEPHALA	3672.00	1428.00	2176.00	2425.33
NAVICULA MINIMA	136.00			45.33
NAVICULA PELLICULOSA			136.00	45.33
NAVICULA SALINARUM VAR. INTERMEDIA	68.00	136.00	102.00	102.00
NAVICULA TRIPUNCTATA	1564.00	816.00	1020.00	1133.33
GROUP MEAN				4160.43

APPENDIX F-7-2 (Continued)

SITE = 26

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NAVICULA VIRIDULA	6800.00	3400.00	6494.00	5564.67
CALONEIS AMPHISBAENA		.60		.20
CALONEIS BACILLUM	136.00		68.00	68.00
AMPHORA OVALIS VAR. PEDICULUS	1088.00	2584.00		1224.00
CYMBELLA AFFINIS	204.00	136.00	68.00	136.00
CYMBELLA MICROCEPHALA	68.00			22.67
CYMBELLA SINUATA	68.00		102.00	56.67
CYMBELLA VENTRICOSA	204.00		34.00	79.33
GOMPHONEMA OLIVACEUM	612.00	68.00	476.00	385.33
EPITHEMIA SOREX	204.00	2312.00	2108.00	1541.33
RHOPALODIA GIBBA	1.20	4.20	3.00	2.80
NITZSCHIA CAPITELLATA			34.00	11.33
NITZSCHIA CHASEI	204.00	748.00	510.00	487.33
NITZSCHIA DISSIPATA	2856.00	1428.00	2040.00	2108.00
NITZSCHIA FRUSTULUM		272.00	306.00	192.67
NITZSCHIA PALEA	68.00			22.67
CYMATOPLEURA SOLEA			.30	.10
SURIRELLA OVATA			5474.00	1824.67
GROUP MEAN				13727.77

APPENDIX F-7-2 (Continued)

SITE = 27

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
CALOTHRIX SPP	1768.00	1122.00	170.00	1020.00
GROUP MEAN				1020.00
CHLOROPHYTA				
CLADOPHORA SPP		15.60	68.00	27.87
GROUP MEAN				27.87
CHRYSOPHYTA				
DIATOMA VULGARE			34.00	11.33
FRAGILARIA PINNATA		136.00		45.33
FRAGILARIA VAUCHERIAE	408.00	204.00	34.00	215.33
SYNEDRA ULNA	.60			.20
COCCONEIS PEDICULUS			34.00	11.33
ACHNANTHES LANCEOLATA	68.00			22.67
ACHNANTHES MINUTISSIMA		238.00	68.00	102.00
GYROSIGMA ACUMINATUM	1.20		.30	.50
NAVICULA CRYPTOCEPHALA	952.00	1224.00	1258.00	1144.67
NAVICULA SALINARUM VAR. INTERMEDIA		102.00	68.00	56.67
NAVICULA TRIPUNCTATA	748.00	986.00	714.00	816.00
NAVICULA VIRIDULA	5100.00	4284.00	4046.00	4476.67
GROUP MEAN				6902.70

APPENDIX F-7-2 (Continued)

SITE = 27

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NAVICULA SP 2		34.00		11.33
CALONEIS AMPHISBAENA		.60		.20
CALONEIS BACILLUM		204.00		68.00
AMPHORA OVALIS VAR. PEDICULUS	2312.00	680.00	1904.00	1632.00
CYMBELLA AFFINIS		170.00		56.67
CYMBELLA SINUATA		68.00		22.67
CYMBELLA VENTRICOSA	204.00	34.00	68.00	102.00
GOMPHONEMA OLIVACEUM	952.00	476.00	476.00	634.67
EPITHEMIA SOREX	2516.00	612.00	986.00	1371.33
RHOPALODIA GIBBA	2.40	.60	34.00	12.33
NITZSCHIA CAPITELLATA	68.00	34.00		34.00
NITZSCHIA CHASEI		136.00	170.00	102.00
NITZSCHIA DISSIPATA	1700.00	1496.00	1360.00	1518.67
NITZSCHIA FRUSTULUM	136.00	2788.00	68.00	997.33
NITZSCHIA PALEA	68.00	34.00		34.00
SURIRELLA OVATA	136.00	34.00		56.67
GROUP MEAN				6653.87

APPENDIX F-7-2 (Continued)

SITE = 28

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
THALASSIOSIRA FLUVIATILIS		68.00		22.67
CYCLOTELLA MENEGHINIANA	34.00			11.33
DIATOMA VULGARE		68.00		22.67
FRAGILARIA CONSTRUENS	68.00			22.67
FRAGILARIA LEPTOSTAURON		34.00		11.33
FRAGILARIA VAUCHERIAE	136.00	204.00	88.00	142.67
SYNEDRA AMPHICEPHALA	34.00	34.00	22.00	30.00
COCCONEIS PLACENTULA		34.00		11.33
ACHNANTHES MINUTISSIMA		68.00		22.67
RHOICOSPHENIA CURVATA			22.00	7.33
GYROSIGMA ACUMINATUM	.40			.13
PLEUROSIGMA DELICATULUM			.30	.10
NAVICULA ARVENSIS		34.00		11.33
NAVICULA CRYPTOCEPHALA	952.00	1088.00	726.00	922.00
NAVICULA MUTICA		22.00		7.33
NAVICULA PELLICULOSA		68.00		22.67
NAVICULA TRIPUNCTATA	408.00	476.00	66.00	316.67
NAVICULA VIRIDULA	6562.00	9588.00	5258.00	7136.00
CALONEIS AMPHISBAENA			.30	.10
AMPHORA OVALIS VAR. PEDICULUS	34.00	68.00		34.00
GROUP MEAN				8755.00

APPENDIX F-7-2 (Continued)

COLLECTION

SITE = 28

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CYMBELLA AFFINIS	136.00	136.00	110.00	127.33
CYMBELLA SINUATA	34.00			11.33
CYMBELLA VENTRICOSA	34.00	68.00	22.00	41.33
GOMPHONEMA OLIVACEUM	952.00	1156.00	506.00	871.33
GOMPHONEMA VENTRICOSUM			22.00	7.33
EPITHEMIA SOREX		68.00		22.67
RHOPALODIA GIBBA			22.00	7.33
NITZSCHIA APICULATA	34.00			11.33
NITZSCHIA CAPITELLATA	170.00	204.00	110.00	161.33
NITZSCHIA DISSIPATA	272.00	136.00	352.00	253.33
NITZSCHIA FRUSTULUM	34.00	34.00	44.00	37.33
NITZSCHIA HOLSATICA	68.00	102.00		56.67
CYMATOPLEURA SOLEA			.60	.20
SURIRELLA OVATA	1598.00	1054.00	682.00	1111.33
GROUP MEAN				2720.20

APPENDIX F-7-2 (Continued)

SITE = 29

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
CALOTHRIX SPP	22.00			7.33
GROUP MEAN				7.33
CHRYSOPHYTA				
DIATOMA TENUE VAR. ELONGATUM			17.00	5.67
DIATOMA VULGARE	22.00			7.33
FRAGILARIA LEPTOSTAURON	88.00			29.33
FRAGILARIA VAUCHERIAE	88.00	45.00	85.00	72.67
SYNEDRA ULNA		11.00	17.00	9.33
ACHNANTHES MINUTISSIMA		11.00	102.00	37.67
NAVICULA ARVENSIS			17.00	5.67
NAVICULA CRYPTOCEPHALA	682.00	157.00	782.00	540.33
NAVICULA MINIMA			17.00	5.67
NAVICULA PELLICULOSA		246.00		82.00
NAVICULA SALINARUM VAR. INTERMEDIA	22.00	33.00		18.33
NAVICULA TRIPUNCTATA	264.00	145.00	204.00	204.33
NAVICULA VIRIDULA	3058.00	1769.00	3383.00	2736.67
NAVICULA SP 2	22.00			7.33
NAVICULA SP 4		11.00		3.67
CALONEIS AMPHISBAENA			.30	.10
GROUP MEAN				3766.10

APPENDIX F-7-2 (Continued)

SITE = 29

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CALONEIS BACILLUM			34.00	11.33
AMPHORA OVALIS VAR. PEDICULUS	968.00	22.00	1632.00	874.00
CYMBELLA AFFINIS	22.00	11.00	34.00	22.33
CYMBELLA MEXICANA	.20			.07
CYMBELLA SINUATA	352.00		187.00	179.67
CYMBELLA VENTRICOSA	88.00	34.00	68.00	63.33
GOMPHONEMA INTRICATUM	66.00			22.00
GOMPHONEMA OLIVACEUM	1166.00	1209.00	969.00	1114.67
GOMPHONEMA VENTRICOSUM	44.00			14.67
EPITHEMIA SOREX	154.00	11.00	187.00	117.33
NITZSCHIA CAPITELLATA	22.00	22.00		14.67
NITZSCHIA CHASEI			34.00	11.33
NITZSCHIA DISSIPATA	330.00	179.00	2448.00	985.67
NITZSCHIA FRUSTULUM	330.00	11.00	221.00	187.33
NITZSCHIA HOLSATICA	22.00			7.33
NITZSCHIA IGNORATA			17.00	5.67
SURIRELLA OVATA	44.00	56.00	629.00	243.00
GROUP MEAN				3874.40

APPENDIX F-7-2 (Continued)

SITE = 30

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
LYNGBYA SPP		68.00		22.67
CALOTHRIX SPP	136.00			45.33
GROUP MEAN				68.00
CHLOROPHYTA				
CLADOPHORA SPP	6.60	63.00		23.20
GROUP MEAN				23.20
CHRYSOPHYTA				
DIATOMA VULGARE	34.00	34.00	17.00	28.33
FRAGILARIA LEPTOSTAURON	34.00	102.00	34.00	56.67
FRAGILARIA PINNATA	68.00			22.67
FRAGILARIA VAUCHERIAE	68.00		34.00	34.00
ACHNANTHES LANCEOLATA			17.00	5.67
ACHNANTHES MINUTISSIMA	68.00			22.67
RHOICOSPHENIA CURVATA	34.00			11.33
NAVICULA CRYPTOCEPHALA	1870.00	680.00	578.00	1042.67
NAVICULA MINIMA		136.00		45.33
NAVICULA PELLICULOSA		34.00		11.33
NAVICULA SALINARUM VAR. INTERMEDIA	102.00	34.00	17.00	51.00
GROUP MEAN				1331.67

APPENDIX F-7-2 (Continued)

SITE = 30

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NAVICULA SUBHAMULATA	136.00			45.33
NAVICULA TRIPUNCTATA	1768.00	272.00	221.00	753.67
NAVICULA VIRIDULA	4488.00	1428.00	2091.00	2669.00
CALONEIS AMPHISBAENA	.30			.10
CALONEIS BACILLUM			34.00	11.33
AMPHORA OVALIS VAR. PEDICULUS	1190.00	1360.00	357.00	969.00
CYMBELLA AFFINIS	136.00		102.00	79.33
CYMBELLA SINUATA		68.00	17.00	28.33
CYMBELLA VENTRICOSA	68.00	102.00	34.00	68.00
GOMPHONEMA OLIVACEUM	272.00	1122.00	1020.00	804.67
GOMPHONEMA VENTRICOSUM	34.00	34.00	34.00	34.00
EPITHEMIA SOREX	714.00	1632.00	17.00	787.67
EPITHEMIA TURGIDA		.30		.10
RHOPALODIA GIBBA	.90		17.00	5.97
CYLINDROTHECA GRACILIS	34.00			11.33
NITZSCHIA CHASEI	34.00	34.00	17.00	28.33
NITZSCHIA DISSIPATA	1768.00	1326.00	510.00	1201.33
NITZSCHIA FRUSTULUM	68.00	306.00		124.67
NITZSCHIA PALEA	34.00			11.33
NITZSCHIA SIGMOIDEA	.30			.10
GROUP MEAN				7633.60

APPENDIX F-7-2 (Continued)

SITE = 30

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CYMATOPLEURA SOLEA			.30	.10
SURIRELLA OVATA	34.00	68.00	68.00	56.67
GROUP MEAN				56.77

APPENDIX F-7-2 (Continued)

SITE = 32

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NAVICULA TRIPUNCTATA	198.00	286.00	902.00	462.00
NAVICULA VAUCHERIAE		22.00		7.33
NAVICULA VIRIDULA	2024.00	1386.00	3828.00	2412.67
NAVICULA SP 2		22.00		7.33
CALONEIS AMPHISBAENA	.20			.07
CALONEIS BACILLUM		22.00	44.00	22.00
AMPHORA OVALIS VAR. PEDICULUS	1298.00	2552.00	528.00	1459.33
CYMBELLA AFFINIS		66.00	88.00	51.33
CYMBELLA SINUATA	44.00		132.00	58.67
CYMBELLA VENTRICOSA		22.00		7.33
DIDYMOSPHENIA GEMINATA			.20	.07
GOMPHONEMA INTRICATUM	22.00			7.33
GOMPHONEMA OLIVACEUM	88.00	330.00		139.33
GOMPHONEMA VENTRICOSUM		22.00		7.33
EPITHEMIA SOREX	396.00	682.00	682.00	586.67
RHOPALODIA GIBBA			.20	.07
NITZSCHIA CHASEI	220.00	220.00	484.00	308.00
NITZSCHIA DISSIPATA		1078.00	3190.00	1422.67
NITZSCHIA FRUSTULUM	1298.00	264.00	22.00	528.00
SURIRELLA OVATA		44.00	44.00	29.33
GROUP MEAN				7516.87

SITE = 32

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
CALOTHRIX SPP	44.00	220.00	286.00	183.33
GROUP MEAN				183.33
CHLOROPHYTA				
CLADOPHORA SPP	6.40	8.20	14.00	9.53
GROUP MEAN				9.53
CHRYSOPHYTA				
DIATOMA VULGARE			22.00	7.33
FRAGILARIA LEPTOSTAURON		22.00		7.33
FRAGILARIA VAUCHERIAE	44.00	44.00	22.00	36.67
COCCONEIS PEDICULUS	22.00			7.33
ACHNANTHES LANCEOLATA			22.00	7.33
ACHNANTHES MINUTISSIMA	22.00	135.00	22.00	59.67
GYROSIGMA ACUMINATUM			.20	.07
NAVICULA ARVENSIS	22.00			7.33
NAVICULA CRYPTOCEPHALA	638.00	660.00	1298.00	865.33
NAVICULA MINIMA		198.00		66.00
NAVICULA PELLICULOSA		44.00		14.67
NAVICULA SALINARUM VAR. INTERMEDIA	44.00	22.00	44.00	36.67
GROUP MEAN				1115.73

APPENDIX F-7-2 (Continued)

SITE = 31

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
CALOTHRIX SPP	442.00	572.00	170.00	394.67
GROUP MEAN				394.67
CHLOROPHYTA				
CLADOPHORA SPP			68.00	22.67
GROUP MEAN				22.67
CHRYSOPHYTA				
DIATOMA VULGARE			102.00	34.00
FRAGILARIA VAUCHERIAE	102.00	66.00		56.00
SYNEDRA AMPHICEPHALA		22.00		7.33
COCCONEIS PEDICULUS	34.00			11.33
ACHNANTHES MINUTISSIMA	136.00	110.00	102.00	116.00
NAVICULA CRYPTOCEPHALA	2040.00	1782.00	1156.00	1659.33
NAVICULA MUTICA		22.00		7.33
NAVICULA SALINARUM VAR. INTERMEDIA	68.00			22.67
NAVICULA TRIPUNCTATA	236.00	374.00	408.00	339.33
NAVICULA VIRIDULA	2754.00	2310.00	2006.00	2356.67
AMPHORA OVALIS VAR. PEDICULUS	306.00	550.00	816.00	557.33
CYMBELLA AFFINIS		132.00	136.00	89.33
GROUP MEAN				5256.67

APPENDIX F-7-2 (Continued)

SITE = 31

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CYMBELLA SINUATA	102.00	44.00	238.00	128.00
CYMBELLA VENTRICOSA	102.00	44.00		48.67
GOMPHONEMA INTRICATUM		22.00		7.33
GOMPHONEMA OLIVACEUM	442.00	110.00	952.00	501.33
EPITHEMIA SOREX	1870.00	2090.00	646.00	1535.33
RHOPALODIA GIBBA	.90	.60	.60	.70
NITZSCHIA CAPITELLATA	34.00	22.00		18.67
NITZSCHIA CHASEI	170.00	352.00	170.00	230.67
NITZSCHIA DISSIPATA	3842.00	2068.00	612.00	2174.00
NITZSCHIA FRUSTULUM		242.00	102.00	114.67
SURIRELLA OVATA	34.00			11.33
GROUP MEAN				4770.70

APPENDIX F-7-2 (Continued)

SITE = 33

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
LYNGBYA SPP	17.00			5.67
GROUP MEAN				5.67
CHLOROPHYTA				
CLADOPHORA SPP	17.00			5.67
GROUP MEAN				5.67
CHRYSOPHYTA				
FRAGILARIA VAUCHERIAE			34.00	11.33
SYNEDRA AMPHICEPHALA		11.00		3.67
COCCONEIS PLACENTULA			17.00	5.67
ACHNANTHES MINUTISSIMA	17.00		68.00	28.33
GYROSIGMA ACUMINATUM			.15	.05
NAVICULA ARVENSIS	17.00			5.67
NAVICULA CRYPTOCEPHALA	272.00	190.00	289.00	250.33
NAVICULA SALINARUM VAR. INTERMEDIA	17.00		51.00	22.67
NAVICULA TRIPUNCTATA	272.00	101.00	170.00	181.00
NAVICULA VIRIDULA	1122.00	1926.00	3162.00	2070.00
CALONEIS AMPHISBAENA			.15	.05
AMPHORA OVALIS VAR. PEDICULUS	17.00	157.00		58.00
GROUP MEAN				2636.77

APPENDIX F-7-2 (Continued)

SITE = 33

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CYMBELLA AFFINIS	34.00	45.00	68.00	49.00
CYMBELLA SINUATA	34.00		17.00	17.00
CYMBELLA VENTRICOSA		123.00	51.00	58.00
GOMPHONEMA OLIVACEUM	4114.00	594.00	714.00	1807.33
EPITHEMIA SOREX			34.00	11.33
RHOPALODIA GIBBA			.15	.05
NITZSCHIA DISSIPATA	51.00	22.00	102.00	58.33
NITZSCHIA FRUSTULUM		22.00	68.00	30.00
SURIRELLA OVATA			17.00	5.67
GROUP MEAN				2036.72

APPENDIX F-7-2 (Continued)

SITE = 34

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
CALOTHRIX SPP	132.00	220.00	528.00	293.33
GROUP MEAN				293.33
CHLOROPHYTA				
CLADOPHORA SPP		22.00		7.33
GROUP MEAN				7.33
CHRYSOPHYTA				
CYCLOTELLA MENEGHINIANA		66.00		22.00
DIATOMA VULGARE		22.00	22.00	14.67
FRAGILARIA VAUCHERIAE	66.00	44.00	110.00	73.33
HANNAEA ARCUS	22.00			7.33
SYNEDRA ULNA	.20		.20	.13
COCCONEIS PEDICULUS		66.00		22.00
ACHNANTHES MINUTISSIMA	22.00	22.00		14.67
NAVICULA CRYPTOCEPHALA	594.00	286.00	902.00	594.00
NAVICULA SALINARUM VAR. INTERMEDIA	154.00		44.00	66.00
NAVICULA TRIPUNCTATA	132.00	44.00	264.00	146.67
NAVICULA VIRIDULA	1848.00	1341.00	2904.00	2031.00
CALONEIS AMPHISBAENA			1.00	.33
GROUP MEAN				2992.13

APPENDIX F-7-2 (Continued)

SITE = 34

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CALONEIS BACILLUM		22.00		7.33
PINNULARIA BOREALIS		22.00		7.33
AMPHORA OVALIS VAR. PEDICULUS	110.00	176.00	198.00	161.33
CYMBELLA AFFINIS		22.00	88.00	36.67
CYMBELLA SINUATA			22.00	7.33
CYMBELLA VENTRICOSA	88.00	44.00	132.00	88.00
GOMPHONEMA OLIVACEUM	440.00	242.00	506.00	396.00
GOMPHONEMA VENTRICOSUM	22.00		44.00	22.00
EPITHEMIA SOREX	6358.00	2002.00	3212.00	3857.33
RHOPALODIA GIBBA	1.60		.80	.80
NITZSCHIA CHASEI	66.00			22.00
NITZSCHIA DISSIPATA	572.00	440.00	924.00	645.33
NITZSCHIA FRUSTULUM	88.00		110.00	66.00
NITZSCHIA LINEARIS	.60	.60		.40
NITZSCHIA SIGMOIDEA	.20			.07
GROUP MEAN				5317.93

APPENDIX F-7-2 (Continued)

SITE = 35

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
CALOTHRIX SPP		425.00	88.00	171.00
GROUP MEAN				171.00
CHLOROPHYTA				
CLADOPHORA SPP			44.00	14.67
GROUP MEAN				14.67
CHRYSOPHYTA				
DIATOMA VULGARE	34.00		154.00	62.67
FRAGILARIA LEPTOSTAURON	34.00			11.33
FRAGILARIA VAUCHERIAE	34.00	34.00	22.00	30.00
SYNEDRA AMPHICEPHALA		17.00		5.67
SYNEDRA ULNA	34.00		22.00	18.67
COCCONEIS PLACENTULA	68.00			22.67
ACHNANTHES MINUTISSIMA	34.00		44.00	26.00
GYROSIGMA ACUMINATUM	34.00			11.33
PLEUROSIGMA DELICATULUM			.20	.07
NAVICULA CRYPTOCEPHALA	374.00	68.00	2002.00	814.67
NAVICULA SALINARUM VAR. *INTERMEDIA*	34.00	17.00	88.00	46.33
NAVICULA SUBHAMULATA			22.00	7.33
GROUP MEAN				1056.73

APPENDIX F-7-2 (Continued)

SITE = 35

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NAVICULA TRIPUNCTATA	136.00	136.00	902.00	391.33
NAVICULA VIRIDULA	3502.00	1428.00	8448.00	4459.33
CALONEIS AMPHISBAENA			.60	.20
AMPHORA OVALIS VAR. PEDICULUS		187.00	528.00	238.33
CYMBELLA AFFINIS			88.00	29.33
CYMBELLA MEXICANA			.20	.07
CYMBELLA SINUATA	34.00	68.00	44.00	48.67
CYMBELLA VENTRICOSA	68.00	85.00	110.00	87.67
GOMPHONEMA OLIVACEUM	680.00	595.00	22.00	432.33
GOMPHONEMA VENTRICOSUM	102.00		44.00	48.67
EPITHEMIA SOREX	170.00	867.00	572.00	536.33
RHOPALODIA GIBBA		.15		.05
NITZSCHIA DISSIPATA	136.00	102.00	1848.00	695.33
NITZSCHIA FRUSTULUM		34.00	44.00	26.00
NITZSCHIA LINEARIS	1.00			.33
NITZSCHIA SIGMOIDEA			.20	.07
NITZSCHIA VERMICULARIS	.30			.10
CYMATOPLEURA SOLEA		.30		.10
SURIRELLA OVATA	68.00	17.00		28.33
GROUP MEAN				7022.58

APPENDIX F-7-3

DENSITIES OF ALGAL TAXA OBSERVED IN THE PERIPHYTON FROM ARTIFICIAL SUBSTRATES DURING RBOSP AQUATIC BASELINE STUDIES APRIL 1976

APPENDIX F-7-3

DENSITIES OF ALGAL TAXA OBSERVED IN THE PERIPHYTON FROM ARTIFICIAL SUBSTRATES DURING RBOSP AQUATIC BASELINE STUDIES, APRIL 1976.

Site = 20

TAXON	REP A	REP B	REP C	MEAN
CHLOROPHYTA				
ULOTHRIX SPP	63.00			21.00
STIGEOCLONIUM SPP	360.00		102.00	154.00
CLADOPHORA SPP		7.00		2.33
GROUP MEAN				177.33
CHRYSOPHYTA				
FRAGILARIA PINNATA	9.00			3.00
FRAGILARIA VAUCHERIAE	225.00	49.00	132.00	135.33
SYNEDRA AMPHICEPHALA	459.00	154.00	756.00	456.33
SYNEDRA PULCHELLA	180.00	21.00	12.00	71.00
SYNEDRA ULNA	.24		6.50	2.25
ACHNANTHES LANCEOLATA	18.00		24.00	14.00
ACHNANTHES MINUTISSIMA	18.00	14.00		10.67
GYROSIGMA ACUMINATUM			.05	.02
NAVICULA CRYPTOCEPHALA	18.00	21.00	24.00	21.00
NAVICULA CUSPIDATA			.05	.02
NAVICULA PELLICULOSA	9.00	7.00	54.00	23.33
NAVICULA VIRIDULA	18.00	49.00	12.00	26.33
NAVICULA SP 1		7.00	6.00	4.33
NAVICULA SP 2	9.00		6.00	5.00
GROUP MEAN				772.61

APPENDIX F-7-3 (Continued)

Site = 20

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CALONEIS VENTRICOSA			6.00	2.00
AMPHORA OVALIS VAR. PEDICULUS			6.00	2.00
GOMPHONEMA OLIVACEUM	18.00			6.00
AMPHIPRORA ALATA	9.00	14.00	6.00	9.67
RHOPALODIA GIBBA			.50	.17
NITZSCHIA CAPITELLATA	126.00	287.00	312.00	241.67
NITZSCHIA DISSIPATA			6.00	2.00
NITZSCHIA FRUSTULUM	9.00	7.00	24.00	13.33
NITZSCHIA HOLSATICA	63.00	21.00	60.00	48.00
NITZSCHIA LINEARIS	9.00	.06	6.60	5.22
NITZSCHIA PALEA	27.00			9.00
SURIRELLA OVATA	1467.00	1099.00	822.00	1129.33
SURIRELLA OVALIS		7.00		2.33
GROUP MEAN				1470.72

APPENDIX F-7-3 (Continued)

Site = 21

TAXON	REP A	REP B	REP C	MEAN
CHLOROPHYTA				
ULOTHRIX SPP			27.00	9.00
CLADOPHORA SPP	57.00	7.00		21.33
GROUP MEAN				30.33
CHRYSOPHYTA				
FRAGILARIA VAUCHERIAE	115.00	127.00	117.00	119.67
SYNEDRA AMPHICEPHALA	787.00	652.00	531.00	656.67
SYNEDRA PULCHELLA	45.00	82.00	54.00	60.33
SYNEDRA ULNA			9.00	3.00
ACHNANTHES LANCEOLATA	6.00	7.00		4.33
ACHNANTHES MINUTISSIMA	32.00	7.00	27.00	22.00
GYROSIGMA ACUMINATUM	.11			.04
PLEUROSIGMA DELICATULUM			.08	.03
NAVICULA CRYPTOCEPHALA	83.00	30.00	81.00	64.67
NAVICULA GREGARIA			9.00	3.00
NAVICULA PELLICULOSA	128.00	75.00	72.00	91.67
NAVICULA PUPULA			9.00	3.00
NAVICULA SALINARUM	6.00	7.00		4.33
NAVICULA SALINARUM VAR. *INTERMEDIA*			9.00	3.00
NAVICULA VIRIDULA	6.00		36.00	14.00
GROUP MEAN				1049.73

APPENDIX F-7-3 (Continued)

Site = 21

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NAVICULA SP 1	51.00	7.00	54.00	37.33
NAVICULA SP 2	32.00	30.00		20.67
PINNULARIA BREBISSONII		7.00		2.33
AMPHORA OVALIS VAR. PEDICULUS			9.00	3.00
GOMPHONEMA AFFINE	32.00			10.67
GOMPHONEMA INTRICATUM		30.00	45.00	25.00
GOMPHONEMA OLIVACEUM	6.00			2.00
GOMPHONEMA VENTRICOSUM			9.00	3.00
AMPHIPRORA ALATA	38.00	7.00		15.00
EPITHEMIA SOREX			9.00	3.00
NITZSCHIA APICULATA		7.00		2.33
NITZSCHIA CAPITELLATA	313.00	142.00	198.00	217.67
NITZSCHIA CHASEI			9.00	3.00
NITZSCHIA DISSIPATA	6.00	15.00		7.00
NITZSCHIA FRUSTULUM	6.00	15.00	72.00	31.00
NITZSCHIA HOLSATICA	313.00	195.00	261.00	256.33
NITZSCHIA HUNGARICA	6.00			2.00
NITZSCHIA LATENS	19.00			6.33
NITZSCHIA LINEARIS	6.00	.06	.80	2.29
NITZSCHIA MICROCEPHALA		7.00		2.33
GROUP MEAN				652.29

APPENDIX F-7-3 (Continued)

Site = 21

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NITZSCHIA PALEA			27.00	9.00
SURIRELLA OVATA	1037.00	787.00	891.00	905.00
SURIRELLA OVALIS	32.00	.06	.08	10.71
GROUP MEAN				924.71

APPENDIX F-7-3 (Continued)

Site = 23

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
DIATOMA VULGARE	18.00	36.00		27.00
FRAGILARIA LEPTOSTAURON	36.00			18.00
FRAGILARIA VAUCHERIAE	72.00	18.00		45.00
ACHNANTHES MINUTISSIMA	54.00	36.00		45.00
NAVICULA CRYPTOCEPHALA	486.00	324.00		405.00
NAVICULA SALINARUM VAR. INTERMEDIA	36.00	18.00		27.00
NAVICULA TRIPUNCTATA	756.00	648.00		702.00
NAVICULA VIRIDULA	4662.00	2790.00		3726.00
AMPHORA OVALIS VAR. PEDICULUS	36.00	18.00		27.00
CYMBELLA AFFINIS		54.00		27.00
CYMBELLA MEXICANA		.16		.08
CYMBELLA VENTRICOSA	36.00	18.00		27.00
DIDYMOSPHENIA GEMINATA		.16		.08
GOMPHONEMA OLIVACEUM	180.00	414.00		297.00
EPITHEMIA SOREX		36.00		18.00
NITZSCHIA DISSIPATA	36.00	126.00		81.00
NITZSCHIA FRUSTULUM	72.00			36.00
NITZSCHIA LINEARIS		2.80		1.40
SURIRELLA OVATA	36.00	18.00		27.00
GROUP MEAN				5536.56

APPENDIX F-7-3 (Continued)

Site = 27

TAXON	REP A	REP B	REP C	MEAN
CHLOROPHYTA				
ULOTHRIX SPP	1.80			.60
GROUP MEAN				.60
CHRYSOPHYTA				
STEPHANODISCUS TENUIS	9.00			3.00
DIATOMA HIEMALE	9.00			3.00
DIATOMA TENUE	9.00			3.00
DIATOMA VULGARE	18.00	18.00	13.00	16.33
FRAGILARIA CONSTRUENS			26.00	8.67
FRAGILARIA LEPTOSTAURON	9.00		26.00	11.67
FRAGILARIA PINNATA	45.00	72.00	13.00	43.33
SYNEDRA AMPHICEPHALA			26.00	8.67
COCCONEIS PEDICULUS			13.00	4.33
COCCONEIS PLACENTULA	27.00		39.00	22.00
ACHNANTHES LANCEOLATA		27.00	13.00	13.33
ACHNANTHES MINUTISSIMA	45.00	45.00	134.00	74.67
NAVICULA CRYPTOCEPHALA	126.00	126.00	208.00	153.33
NAVICULA SALINARUM VAR. INTERMEDIA	27.00	18.00	39.00	28.00
NAVICULA TRIPUNCTATA	72.00	45.00	169.00	95.33
NAVICULA VIRIDULA	612.00	423.00	1261.00	765.33
GROUP MEAN				1254.00

APPENDIX F-7-3 (Continued)

Site = 27

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CALONEIS AMPHISBAENA		.16		.05
CALONEIS BACILLUM		9.00		3.00
CALONEIS VENTRICOSA		9.00		3.00
AMPHORA OVALIS VAR. PEDICULUS	9.00	18.00	91.00	39.33
CYMBELLA AFFINIS	27.00	54.00	13.00	31.33
CYMBELLA MEXICANA	.24	.08		.11
CYMBELLA SINUATA			13.00	4.33
CYMBELLA VENTRICOSA	54.00	36.00	91.00	60.33
DIDYMOSPHENIA GEMINATA	.08		.11	.06
GOMPHONEMA OLIVACEUM	288.00		468.00	252.00
GOMPHONEMA VENTRICOSUM	9.00			3.00
EPITHEMIA SOREX	45.00	18.00	39.00	34.00
RHOPALODIA GIBBA	9.00			3.00
NITZSCHIA ACICULARIS		9.00		3.00
NITZSCHIA CAPITELLATA		9.00		3.00
NITZSCHIA CHASEI	27.00		13.00	13.33
NITZSCHIA DISSIPATA	171.00	189.00	650.00	336.67
NITZSCHIA FRUSTULUM	18.00	9.00	26.00	17.67
NITZSCHIA HOLSATICA			13.00	4.33
NITZSCHIA LINEARIS	.08	1.00	.11	.40
GROUP MEAN				811.95

APPENDIX F-7-3 (Continued)

Site = 27

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
NITZSCHIA PALEA			13.00	4.33
NITZSCHIA VERMICULARIS		.08		.03
CYMATOPLEURA SOLEA	.08	.08		.05
SURIRELLA OVATA	54.00	27.00	39.00	40.00
GROUP MEAN				44.41

APPENDIX F-7-3 (Continued)

Site = 29

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
DIATOMA VULGARE		54.00	22.00	25.33
FRAGILARIA CONSTRUENS			22.00	7.33
FRAGILARIA CROTONENSIS			67.00	22.33
FRAGILARIA LEPTOSTAURON	9.00		135.00	48.00
FRAGILARIA PINNATA	9.00			3.00
FRAGILARIA VAUCHERIAE		72.00	22.00	31.33
SYNEDRA AMPHICEPHALA	18.00	54.00		24.00
SYNEDRA ULNA	18.00		22.00	13.33
COCCONEIS PLACENTULA	9.00	18.00		9.00
GYROSIGMA ACUMINATUM	.11		.20	.10
PLEUROSIGMA DELICATULUM	.11		.20	.10
NAVICULA CRYPTOCEPHALA	27.00	72.00	247.00	115.33
NAVICULA SALINARUM VAR. INTERMEDIA	18.00	36.00		18.00
NAVICULA TRIPUNCTATA	1269.00	54.00	157.00	493.33
NAVICULA VIRIDULA		2070.00	3195.00	1755.00
PINNULARIA BOREALIS			22.00	7.33
AMPHORA OVALIS VAR. PEDICULUS			22.00	7.33
CYMBELLA AFFINIS	18.00		45.00	21.00
CYMBELLA MEXICANA	.11	.16		.09
CYMBELLA PROSTRATA		.16		.05
GROUP MEAN				2601.35

APPEBDIX F-7-3 (Continued)

Site = 29

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CYMBELLA SINUATA		18.00		6.00
CYMBELLA VENTRICOSA	18.00	36.00	112.00	55.33
GOMPHONEMA OLIVACEUM	180.00	846.00		342.00
EPITHEMIA SOREX			90.00	30.00
NITZSCHIA APICULATA			22.00	7.33
NITZSCHIA CAPITELLATA	153.00	54.00	22.00	76.33
NITZSCHIA DISSIPATA	81.00	108.00	157.00	115.33
NITZSCHIA FRUSTULUM		18.00	22.00	13.33
NITZSCHIA LINEARIS	.55			.18
NITZSCHIA VERMICULARIS	.11		.20	.10
CYMATOPLEURA SOLEA	.33	.16	.20	.23
SURIRELLA OVATA	495.00	522.00	315.00	444.00
SURIRELLA OVALIS			.20	.07
GROUP MEAN				1090.25

APPENDIX F-7-3 (Continued)

Site = 35

TAXON	REP A	REP B	REP C	MEAN
CYANOPHYTA				
OSCILLATORIA SPP	18.00			6.00
GROUP MEAN				6.00
CHRYSOPHYTA				
DIATOMA HIEMALE	18.00			6.00
DIATOMA VULGARE			72.00	24.00
FRAGILARIA LEPTOSTAURON	18.00		54.00	24.00
FRAGILARIA PINNATA		45.00		15.00
FRAGILARIA VAUCHERIAE	36.00	45.00	72.00	51.00
COCCONEIS PEDICULUS	18.00	45.00	18.00	27.00
ACHNANTHES MINUTISSIMA	18.00	45.00	18.00	27.00
GYROSIGMA ACUMINATUM		.20	.16	.12
NAVICULA CRYPTOCEPHALA	306.00	180.00	324.00	270.00
NAVICULA PELLICULOSA			18.00	6.00
NAVICULA SALINARUM VAR. INTERMEDIA		22.00	36.00	19.33
NAVICULA TRIPUNCTATA	234.00	405.00	162.00	267.00
NAVICULA VIRIDULA	1224.00	1912.00	1242.00	1459.33
NAVICULA SP 2		22.00		7.33
CALONEIS AMPHISBAENA	.16		.32	.16
CYMBELLA AFFINIS	18.00	22.00		13.33
GROUP MEAN				2216.61

APPENDIX F-7-3 (Continued)

Site = 35

TAXON	REP A	REP B	REP C	MEAN
CHRYSOPHYTA				
CYMBELLA MEXICANA			.16	.05
CYMBELLA VENTRICOSA	54.00	67.00	126.00	82.33
GOMPHONEMA INTRICATUM			54.00	18.00
GOMPHONEMA OLIVACEUM	144.00	450.00	558.00	384.00
EPITHEMIA SOREX		45.00	252.00	99.00
RHOPALODIA GIBBERULA	18.00			6.00
CYLINDROTHECA GRACILIS			18.00	6.00
HANTZSCHIA AMPHIOXYS			18.00	6.00
NITZSCHIA APICULATA	18.00			6.00
NITZSCHIA CAPITELLATA			36.00	12.00
NITZSCHIA CHASEI			18.00	6.00
NITZSCHIA DISSIPATA	162.00	112.00	486.00	253.33
NITZSCHIA FRUSTULUM			54.00	18.00
NITZSCHIA HOLSATICA			18.00	6.00
NITZSCHIA LINEARIS	.64	22.00	18.00	13.55
NITZSCHIA VERMICULARIS			.32	.11
CYMATOPLEURA SOLEA	.32		.16	.16
SURIRELLA OVATA		45.00	18.00	21.00
SURIRELLA OVALIS	18.00			6.00
GROUP MEAN				943.53

2.4.5 Benthos

Appendix F-8-1 presents a partial listing of the benthic taxa found during the April 1976 (laboratory analyses of Chironomidae and Oligochaeta from that period are presently being completed). Quantitative benthos data for the April 1976 sampling (excluding Chironomidae and Oligochaeta) are presented in Appendix F-8-2.

During the April 1976 sampling period, the most abundant benthic taxa at the headwater stations included Baetidae, *Baetis*, Chironomidae, and *Ophiogomphus severus*. The most abundant taxa at the tract stations included *Ophiogomphus severus*, Chironomidae, and Oligochaeta. In Yellow Creek, the most abundant taxa were Oligochaeta, Chironomidae, and Simuliidae. In the White River, *Ephemerella*, Oligochaeta, and Chironomidae were the dominant benthic taxa.

Preliminary comparison of the April 1976 benthos data with those of April 1975 suggest that the composition of the dominant benthic taxa in the study area was generally similar from year to year. Chironomidae and Oligochaeta were abundant in all of the sampling areas. During both sampling periods, benthic macroinvertebrates were the dominant organisms at the primary and secondary consumer levels in waters of the study area.

2.4.5 - Benthos Data

APPENDIX F-8-1

MACROINVERTEBRATE TAXA
RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX F-8-1

MACROINVERTEBRATE TAXA OBSERVED DURING RBOSP AQUATIC BASELINE STUDIES, APRIL 1976

- Platyhelminthes
  - Turbellaria
    - Tricladida
      - Planariidae

- Nematoda

- Mollusca
  - Gastropoda
    - Basommatophora
      - Physidae
        - *Physa* Draparnaud
      - Lymnaeidae
        - *Lymnaea* Lamark

- Annelida
  - Hirudinea
    - Rhynchobdellida
      - Glossiphoniidae
        - *Helobdella stagnalis* (Linnaeus)
  - Oligochaeta

- Arthropoda
  - Arachnoida
    - Acari
  - Crustacea
    - Amphipoda
      - Talitridae
        - *Hyallela azteca* (Saussure)
  - Insecta
    - Collembola
    - Ephemeroptera
    - Heptageniidae
      - *Heptagenia* Walsh
      - *Rhithrogena* Eaton
    - Baetidae
      - *Baetis* Leach
    - Ephemerellidae
      - *Ephemerella* Walsh
    - Tricorythidae
      - *Tricorythodes* Ulmer
    - Caenidae
      - *Caenis* Stephens
    - Leptophlebiidae
  - Odonata
    - Coenagrionidae

- *Coenagrion* (Fabricius)
- Gomphidae
  - *Ophiogomphus severus* Hagen
- Plecoptera
  - Perlodidae
    - *Isoperla* Banks
    - *Isogenus* Newman
    - *Isogenoides* Klapalek
- Coleoptera
  - Haliplidae
    - *Peltodytes* Regimbart
  - Dytiscidae
    - *Deronectes* Sharp
  - Hydrophilidae
  - Elmidae
    - *Dubiraphia* Sanderson
    - *Microcylloepus* Hinton
    - *Optioservus* Sanderson
    - *Zaitzevia* Champion
  - Dryopidae
    - *Helichus* Erichson
- Trichoptera
  - Hydropsychidae
    - *Hydropsyche* Pictet
  - Hydroptilidae
    - *Mayatrichia* Mosely
  - Limnephilidae
    - *Grammotaulius* Kolenati
    - *Hesperophylax* Banks
  - Leptoceridae
    - *Oecetis* McLachlan
- Lepidoptera
  - Pyralidae
- Diptera
  - Tipulidae
    - *Ormosia* Rondani
    - *Dicranota* Zetterstedt
    - *Limnophila* Macquart
    - *Holorusia* Loew
  - Ceratopogonidae
  - Chironomidae
  - Simuliidae
    - *Simulium* Latreille
  - Stratiomyiidae
    - *Euparyphus* Gerstaecker
  - Tabanidae
    - *Chrysops* Meigen
  - Rhagionidae
    - *Atherix variegata* Walker

Empididae
Anthomyiidae
  Limnophora aequifrons Stein

RBOSP PROGRAM LIBRARY

APPENDIX F-8-2

DENSITIES OF BENTHOS (MACROINVERTEBRATES)
RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX F-8-2

DENSITIES OF BENTHOS (MACROINVERTEBRATES) OBSERVED DURING RBOSP AQUATIC BASELINE STUDIES, APRIL 1976[1]. (Organisms/m^2)

	Station Replicate								
	2			3			4		
	A	B	C	A	B	C	A	B	C
Sampling Method:[2]		ES			ES			ES	
Tricladida									
Nematoda						18	36		
Physa									
Lymnaea									
Helobdella stagnalis									
Oligochaeta		36	54			18		54	18
Acari							18		
Hyalella azteca									
Collembola									
Baetidae	163	308	127		91		7475	5177	833
Baetis	36	54	253		18		434	54	2082
Heptagenia									
Rhithrogena									
Ephemerella									
Tricorythodes									
Caenis									
Leptophlebiidae									
Coenagrionidae									
Coenagrion									
Gomphidae									
Ophiogomphus severus									

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[1] Stations 1, 6, 10 - 12, and 16 were dry at the time of sampling.

[2] Sampling Method: ES = Elliptical Modified Surber; TS = Tall Modified Surber

RBOSP PROGRESS REPOR

APPENDIX F-8-2 (Continued)

	Station Replicate								
	2			3			4		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Plecoptera									
Isoperla							36	36	18
Isogenus									
Isogenoides									
Peltodytes									
Dytiscidae	18	18						18	
Deronectes									
Hydrophilidae									
Dubiraphia									
Microcylloepus									
Optioservus									
Zaitzevia									
Helichus									
Trichoptera									
Hydropsychidae									
Hydropsyche									
Hydroptilidae									
Mayatrichia									
Limnephilidae									
Grammotaulius									
Hesperophylax	36	36							
Oecetis									
Pyralidae									
Ormosia					18		18		
Dicranota	36	127	18						
Limnophila									
Holorusia	235	145	91	36	181	36	181	163	54
Ceratopogonidae								18	18

APPENDIX F-8-2 (Continued)

	Station Replicate								
	2			3			4		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Chironomidae larvae	36	18	18	1358	1756	3349	996	3240	344
Chironomidae pupae	18	18		18	36		91	109	127
Simuliidae							398	109	217
Simulium							18		18
Euparyphus							91	36	
Chrysops									
Atherix variegata									
Empididae									
Limnophora aequifrons									

APPENDIX F-8-2 (Continued)

	Station Replicate								
	5			7			8		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Tricladida									18
Nematoda				54	18	18		18	18
Physa									
Lymnaea									
Helobdella stagnalis									
Oligochaeta				145	54	18			
Acari									
Hyalella azteca									
Collembola	36	18	54						
Baetidae				109	18			18	
Baetis				18					
Heptagenia			18						
Rhithrogena									
Ephemerella									
Tricorythodes									
Caenis									
Leptophlebiidae									
Coenagrionidae									
Coenagrion	36	54	72						
Gomphidae	181	217	253						
Ophiogomphus severus	1050	2462	2552						

APPENDIX F-8-2 (Continued)

	Station Replicate								
	5			7			8		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Plecoptera		72	72						
Isoperla	253	652	561					18	72
Isogenus									
Isogenoides									
Peltodytes									
Dytiscidae									
Deronectes			36						
Hydrophilidae					36				
Dubiraphia									
Microcylloepus	434	398	959						
Optioservus			18						
Zaitzevia									
Helichus			18						
Trichoptera	217	706	959						
Hydropsychidae		18							
Hydropsyche	72	163	36						
Hydroptilidae									
Mayatrichia		36	54						
Limnephilidae		72							
Grammotaulius									
Hesperophylax									
Oecetis									
Pyralidae									
Ormosia		18							
Dicranota						18		36	36
Limnophila	18								
Holorusia							145	127	145
Ceratopogonidae					36	54			

APPENDIX F-8-2 (Continued)

	Station Replicate								
	5			7			8		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Chironomidae larvae				91	54	217	181	199	217
Chironomidae pupae				18	18		18	18	
Simuliidae									
Simulium									
Euparyphus									
Chrysops									
Atherix variegata									
Empididae			36		91	36			
Limnophora aequifrons									

APPENDIX F-8-2 (Continued)

	Station Replicate								
	9			13			14		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Tricladida									
Nematoda				18	36	18	199	127	235
Physa									
Lymnaea									
Helobdella stagnalis									
Oligochaeta	54	54	36	18	18	54	308	109	706
Acari									18
Hyalella azteca									
Collembola									
Baetidae		109	72	145	217		72		
Baetis			72	18	18	36		18	18
Heptagenia									
Rhithrogena									
Ephemerella									
Tricorythodes									
Caenis									
Leptophlebiidae									
Coenagrionidae						18			
Coenagrion									
Gomphidae									
Ophiogomphus severus									

APPENDIX F-8-2 (Continued)

	Station Replicate								
	9			13			14		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Plecoptera									
Isoperla				36	18	18			18
Isogenus									
Isogenoides									
Peltodytes									
Dytiscidae							18		
Deronectes							36	18	
Hydrophilidae									
Dubiraphia									
Microcylloepus									
Optioservus									
Zaitzevia									
Helichus									54
Trichoptera									
Hydropsychidae									
Hydropsyche									
Hydroptilidae									18
Mayatrichia									
Limnephilidae									
Grammotaulius									
Hesperophylax									
Oecetis									
Pyralidae									
Ormosia				18					
Dicranota									
Limnophila									
Holorusia				72		36			
Ceratopogonidae			18	18		36	181	91.	217

APPENDIX F-8-2 (Continued)

	Station Replicate								
	9			13			14		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Chironomidae larvae	217	127	163	1484	1792	2552	14860	10118	18824
Chironomidae pupae						91	1520	1303	2968
Simuliidae							54		18
Simulium								18	54
Euparyphus		18							
Chrysops									
Atherix variegata									
Empididae						18			
Limnophora aequifrons							36		36

APPENDIX F-8-2 (Continued)

	Station Replicate								
	15			17			18		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Tricladida									
Nematoda									
Physa									
Lymnaea									
Helobdella stagnalis									
Oligochaeta	18	91	54			54	18	109	
Acari									
Hyalella azteca									
Collembola									
Baetidae	36	91	217						
Baetis			54						
Heptagenia									
Rhithrogena									
Ephemerella									
Tricorythodes									
Caenis									
Leptophlebiidae									
Coenagrionidae									
Coenagrion									
Gomphidae									
Ophiogomphus severus									

APPENDIX F-8-2 (Continued)

	Station Replicate								
	15			17			18		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Plecoptera									
Isoperla	18								
Isogenus									
Isogenoides									
Peltodytes									
Dytiscidae									
Deronectes		18					18		
Hydrophilidae									
Dubiraphia									
Microcylloepus									
Optioservus									
Zaitzevia									
Helichus									
Trichoptera			18						
Hydropsychidae									
Hydropsyche									
Hydroptilidae	72								
Mayatrichia									
Limnephilidae									
Grammotaulius									
Hesperophylax									
Oecetis									
Pyralidae									
Ormosia									
Dicranota									
Limnophila									
Holorusia									
Ceratopogonidae		18	36					36.	18

APPENDIX F-8-2 (Continued)

	Station Replicate								
	15			17			18		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Chironomidae larvae	2570	3385	6733	1231	561	1041	109	670	235
Chironomidae pupae		18							
Simuliidae	127	18	54						
Simulium									
Euparyphus									
Chrysops									
Atherix variegata									
Empididae									
Limnophora aequifrons									

APPENDIX F-8-2 (Continued)

	Station Replicate								
	19			20			21		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Tricladida									
Nematoda	18	181	54	235	525	199	398	326	145
Physa									
Lymnaea			18						
Helobdella stagnalis	18								
Oligochaeta	91	199	181	4235	4109	453	453	525	308
Acari	326	127	308						
Hyalella azteca	290	253	235						
Collembola						18			
Baetidae	18	18							
Baetis									
Heptagenia									
Rhithrogena									
Ephemerella									
Tricorythodes									
Caenis	18		72						
Leptophlebiidae									
Coenagrionidae	54	54	54						
Coenagrion	36	54	91						
Gomphidae									
Ophiogomphus severus									

APPENDIX F-8-2 (Continued)

	Station Replicate								
	19			20			21		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Plecoptera									
Isoperla									
Isogenus									
Isogenoides									
Peltodytes	36								
Dytiscidae									
Deronectes	72	18	36				18		145
Hydrophilidae									
Dubiraphia									
Microcylloepus									
Optioservus			18						
Zaitzevia									
Helichus									
Trichoptera									
Hydropsychidae									
Hydropsyche									
Hydroptilidae	72	36	36				18		
Mayatrichia									
Limnephilidae	18								
Grammotaulius			18						
Hesperophylax									
Oecetis									
Pyralidae									
Ormosia								18	
Dicranota									
Limnophila									
Holorusia									
Ceratopogonidae	434	543	561	91	91	36	181	308	489

APPENDIX F-8-2 (Continued)

	Station Replicate								
	19			20			21		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			ES			ES	
Chironomidae larvae	8579	6842	4561	1611	1177	253	996	1557	380
Chironomidae pupae	91	91	127						
Simuliidae	17937	4616	6733	18	18	36		18	
Simulium	272	54	72						
Euparyphus	18								
Chrysops						18			
Atherix variegata									
Empididae									
Limnophora aequifrons									

APPENDIX F-8-2 (Continued)

	Station Replicate								
	22			23			24		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			TS			TS	
Tricladida									
Nematoda	181	127	272	39	20		39	98	195
Physa									
Lymnaea									
Helobdella stagnalis									
Oligochaeta	326	18	54	371	293	78	1092	449	507
Acari									
Hyalella azteca									
Collembola									
Baetidae				20	78	20	234	176	137
Baetis					20		20		
Heptagenia									
Rhithrogena				39	59			20	
Ephemerella				995	2282	605	1073	1521	819
Tricorythodes				20	20	39	20	78	
Caenis									
Leptophlebiidae									
Coenagrionidae									
Coenagrion									
Gomphidae									
Ophiogomphus severus									

APPENDIX F-8-2 (Continued)

	Station Replicate								
	22			23			24		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			TS			TS	
Plecoptera				20	117	39		78	20
Isoperla				20	59	39	117	215	20
Isogenus				39					
Isogenoides				20					
Peltodytes									
Dytiscidae									
Deronectes			18						
Hydrophilidae									
Dubiraphia									
Microcylloepus									
Optioservus									
Zaitzevia									
Helichus									
Trichoptera									
Hydropsychidae					20	20	20	39	20
Hydropsyche				98	234	176	39	59	98
Hydroptilidae							20		
Mayatrichia								20	
Limnephilidae									
Grammotaulius									
Hesperophylax									
Oecetis									
Pyralidae							20		
Ormosia									
Dicranota									
Limnophila				59	78	78	59	20	98
Holorusia									
Ceratopogonidae	36	18	36						

APPENDIX F-8-2 (Continued)

	Station Replicate								
	22			23			24		
	A	B	C	A	B	C	A	B	C
Sampling Method:		ES			TS			TS	
Chironomidae larvae	272	670	326	1191	936	546	2730	2886	3354
Chironomidae pupae				137	78	137	371	156	195
Simuliidae		18	36						
Simulium									
Euparyphus									
Chrysops									
Atherix variegata						20	20	20	
Empididae							20		
Limnophora aequifrons									

APPENDIX F-8-2 (Continued)

	Station Replicate								
	25			26			27		
	A	B	C	A	B	C	A	B	C
Sampling Method:		TS			TS			TS	
Tricladida		98	59	137		117			39
Nematoda									
Physa									
Lymnaea									
Helobdella stagnalis									
Oligochaeta	39	78	59	176	39	624	78	59	78
Acari	39						20		
Hyalella azteca									
Collembola									
Baetidae	429	78	566	215	156	78	20	137	39
Baetis	137		20	78	59		20		
Heptagenia	39	20							
Rhithrogena	20	78		39	39				
Ephemerella	4797	4466	2964	2691	2496	1658	2009	1814	761
Tricorythodes	273	254	117	78	59	20	156	59	78
Caenis									
Leptophlebiidae	20	20	20						
Coenagrionidae									
Coenagrion									
Gomphidae									
Ophiogomphus severus			20						

APPENDIX F-8-2 (Continued)

	Station Replicate								
	25			26			27		
	A	B	C	A	B	C	A	B	C
Sampling Method:		TS			TS			TS	
Plecoptera	605	234	137	39	78	78	117	39	39
Isoperla	293	195	20	98	98			20	20
Isogenus									
Isogenoides									
Peltodytes									
Dytiscidae									
Deronectes									
Hydrophilidae									
Dubiraphia		20							
Microcylloepus		20							
Optioservus									
Zaitzevia									
Helichus		20							
Trichoptera									
Hydropsychidae	215	156	351	98	20		20	20	59
Hydropsyche	449	254	351	137	20	59	39		78
Hydroptilidae	20			20		20	20	20	
Mayatrichia									
Limnephilidae									
Grammotaulius									
Hesperophylax									
Oecetis			78				20		
Pyralidae	78						39		20
Ormosia									
Dicranota									
Limnophila		20	39	39		39	20		20
Holorusia									
Ceratopogonidae				20			20		

APPENDIX F-8-2 (Continued)

	Station Replicate								
	25			26			27		
	A	B	C	A	B	C	A	B	C
Sampling Method:		TS			TS			TS	
Chironomidae larvae	722	1268	741	1814	507	819	527	429	566
Chironomidae pupae	39	215	39	351	78	20	59	59	20
Simuliidae									
Simulium									
Euparyphus									
Chrysops									
Atherix variegata	39	59							
Empididae	20	20		20					
Limnophora aequifrons									

APPENDIX F-8-2 (Continued)

Station Replicate	28 A	28 B	28 C	29 A	29 B	29 C	30 A	30 B	30 C
Sampling Method:		TS			TS			TS	
Tricladida									
Nematoda						59			20
Physa									
Lymnaea									
Helobdella stagnalis									
Oligochaeta	312	156	156	117	702	1814	410	390	117
Acari						20		39	78
Hyalella azteca									
Collembola									
Baetidae	39	20	78		20	98	20	137	39
Baetis				20		20			
Heptagenia									
Rhithrogena				273	273	234		20	
Ephemerella	312	234	176	254	254	371	2048	917	1248
Tricorythodes							156	78	254
Caenis									
Leptophlebiidae	20								
Coenagrionidae									
Coenagrion									
Gomphidae									20
Ophiogomphus severus									

APPENDIX F-8-2 (Continued)

	Station Replicate								
	28			29			30		
	A	B	C	A	B	C	A	B	C
Sampling Method:		TS			TS			TS	
Plecoptera				39	20	39	78	39	293
Isoperla			20	176	137	59			
Isogenus									
Isogenoides									
Peltodytes									
Dytiscidae									
Deronectes									
Hydrophilidae									
Dubiraphia									
Microcylloepus							39	39	20
Optioservus									
Zaitzevia									
Helichus									
Trichoptera									
Hydropsychidae						20	59	273	741
Hydropsyche					20		234	273	1307
Hydroptilidae							39		39
Mayatrichia									
Limnephilidae									
Grammotaulius									
Hesperophylax									
Oecetis									20
Pyralidae									
Ormosia									
Dicranota									
Limnophila			20	20			117	20	
Holorusia									
Ceratopogonidae						39			

APPENDIX F-8-2 (Continued)

	Station Replicate								
	28			29			30		
	A	B	C	A	B	C	A	B	C
Sampling Method:		TS			TS			TS	
Chironomidae larvae	234	254	156		20	98	1541	956	1404
Chironomidae pupae	20					20	254	156	59
Simuliidae									
Simulium									
Euparyphus									
Chrysops									
Atherix variegata							20		
Empididae	20						59	20	20
Limnophora aequifrons									

APPENDIX F-8-2 (Continued)

	Station Replicate								
	31			32			33		
	A	B	C	A	B	C	A	B	C
Sampling Method:		TS			TS			TS	
Tricladida									
Nematoda	59	117	78	20	59	156	20		20
Physa									
Lymnaea									
Helobdella stagnalis									
Oligochaeta	78	449	254	2243	2847	1833	137	98	234
Acari		39	39	20					
Hyalella azteca									
Collembola									
Baetidae		390	156	20	20	20	59	20	20
Baetis									20
Heptagenia		20							
Rhithrogena		78					20		20
Ephemerella	839	2633	1716	449	1307	1131	605	507	468
Tricorythodes	20	39	59	20			39		
Caenis									
Leptophlebiidae									
Coenagrionidae									
Coenagrion									
Gomphidae									
Ophiogomphus severus									

APPENDIX F-8-2 (Continued)

	Station Replicate								
	31			32			33		
	A	B	C	A	B	C	A	B	C
Sampling Method:		TS			TS			TS	
Plecoptera	59	78	117	20	59	98			
Isoperla	20	20	39	59	59	78	20		
Isogenus									
Isogenoides						20			
Peltodytes									
Dytiscidae									
Deronectes									
Hydrophilidae									
Dubiraphia									
Microcylloepus									
Optioservus									
Zaitzevia		20							
Helichus									
Trichoptera									
Hydropsychidae	59	39	351		39	20			
Hydropsyche	371	234	683	78	156	176			
Hydroptilidae			20		20				
Mayatrichia									
Limnephilidae									
Grammotaulius									
Hesperophylax									
Oecetis									
Pyralidae			39	20					
Ormosia									
Dicranota									
Limnophila	78	78	78		20	39	117	59	20
Holorusia									
Ceratopogonidae	20		39	20		20		20	

APPENDIX F-8-2 (Continued)

	Station Replicate								
	31			32			33		
	A	B	C	A	B	C	A	B	C
Sampling Method:		TS			TS			TS	
Chironomidae larvae	722	702	975	332	585	936	605	312	156
Chironomidae pupae	137	117	98	117	117	78	78	39	20
Simuliidae									
Simulium									
Euparyphus									
Chrysops									
Atherix variegata			20						
Empididae	39	39							
Limnophora aequifrons									

APPENDIX F-8-2 (Continued)

	Station Replicate					
	34			35		
	A	B	C	A	B	C
Sampling Method:		TS			TS	
Tricladida						
Nematoda		39		20	20	
Physa						
Lymnaea						
Helobdella stagnalis						
Oligochaeta	137	156	254	20	117	20
Acari						20
Hyalella azteca						
Collembola						
Baetidae	39	39	137	20	20	
Baetis						
Heptagenia						
Rhithrogena						
Ephemerella	98	234	644	273	176	351
Tricorythodes				20		20
Caenis						
Leptophlebiidae						
Coenagrionidae						
Coenagrion						
Gomphidae						
Ophiogomphus severus						20

APPENDIX F-8-2 (Continued)

Station Replicate	34 A	34 B	34 C	35 A	35 B	35 C
Sampling Method:		TS			TS	
Plecoptera			20			
Isoperla			20			
Isogenus						
Isogenoides						
Peltodytes						
Dytiscidae						
Deronectes						
Hydrophilidae						
Dubiraphia						
Microcylloepus						
Optioservus						
Zaitzevia						
Helichus						
Trichoptera						
Hydropsychidae						
Hydropsyche		39	156		20	
Hydroptilidae			20	39		
Mayatrichia						
Limnephilidae						
Grammotaulius						
Hesperophylax						
Oecetis						
Pyralidae						
Ormosia						
Dicranota						
Limnophila	39		98	59	98	20
Holorusia						
Ceratopogonidae		20	20			

APPENDIX F-8-2 (Continued)

	Station Replicate					
	34			35		
	A	B	C	A	B	C
Sampling Method:		TS			TS	
Chironomidae larvae	98	273	722	897	351	1092
Chironomidae pupae	20	59		39	78	195
Simuliidae						
Simulium						
Euparyphus						
Chrysops						
Atherix variegata						
Empididae						20
Limnophora aequifrons						

2.4.6 Sediment Chemistry

Appendix F-9-1 includes the results of chemical analysis of sediment samples collected during April 1976. A summary of results for selected parameters for the April sampling is presented below. Concentrations of the parameters were generally similar to those observed during the fall of 1975.

April 1976

Parameter (μg/g)	White River	Yellow Creek
Aluminum	3000-13000	7300-12000
Arsenic	3- 5	4- 6
Lead	8- 12	9- 12
Zinc	25- 52	27- 53

Comparison of the April 1976 ranges of concentration for these parameters with the ranges observed in April 1975, indicate that during April 1975 greater concentrations of aluminum (6,900 - 20,400 μg/g) and zinc (50 - 110 μg/g) were observed in the White River and greater concentration of aluminum (4,200 - 24,050 μg/g) was observed in Yellow Creek than during April 1976. The ranges of concentration for other constituents were similar during the two April sampling periods.

2.4.6 - Sediment Chemistry Data

RBOSP PROGRESS

APPENDIX F-9-1

RESULTS OF SEDIMENT CHEMISTRY ANALYSIS
RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX F-9-1

RESULTS OF SEDIMENT CHEMISTRY ANALYSIS DURING RBOSP AQUATIC BASELINE STUDIES, APRIL 1976.[1]

(Results are expressed in µg/g unless otherwise noted.)

Station	PARAMETER							
	Aluminum (Al)	Arsenic (As)	Lead (Pb)	Mercury (Hg)(ppb)	Kjeldahl (N)	Phosphate (P)	Volatile Solids	Zinc (Zn)
2-A	11000	27	18	31	815	1010	49900	63
2-B	10000	25	18	30	804	1020	48600	62
3-A	9600	7	15	<20	361	773	31800	46
3-B	11000	7	15	<20	371	784	33600	48
4-A	12000	10	16	<20	1040	797	54100	44
4-B	12000	11	15	<20	1012	836	59200	51
5-A	11000	3	12	<20	1020	725	50600	50
5-B	10000	3	12	<20	615	683	39300	46
7-A	9000	12	14	<20	307	728	29900	42
7-B	9700	11	15	20	307	742	31200	42
8-A	10000	12	14	20	503	774	39300	46
8-B	10000	10	16	<20	539	777	42300	46
9-A	10000	16	18	<20	315	726	37600	48
9-B	10000	23	20	24	335	774	37600	48
13-A	10000	9	15	<20	589	736	44600	47
13-B	10000	9	15	24	366	727	43600	47
14-A	9800	2	11	<20	215	519	32600	37
14-B	10000	3	11	<20	218	508	30800	38
15-A	9000	6	11	<20	177	603	29100	35
15-B	9200	7	12	<20	173	596	28000	34

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[1] Stations 1, 6, 10-12, and 16 were dry or inaccessible at the time of sampling.

APPENDIX F-9-1 (Continued)

Station	Aluminum (Al)	Arsenic (As)	Lead (Pb)	Mercury (Hg)(ppb)	Kjeldahl (N)	Phosphate (P)	Volatile Solids	Zinc (Zn)
	PARAMETER							
17-A	9000	2	10	36	100	593	21600	31
17-B	7500	3	9	20	94	555	21200	30
18-A	8400	3	10	127	95	599	21600	36
18-B	7600	3	10	117	86	535	21900	35
19-A	7300	4	9	45	104	646	19400	27
19-B	8200	4	10	74	114	706	22100	28
20-A	8400	6	11	20	384	596	36400	39
20-B	9100	6	11	< 20	399	610	35500	39
21-A	12000	5	13	24	754	734	59000	53
21-B	12000	6	13	28	773	737	58400	52
22-A	10000	6	12	28	532	711	50300	44
22-B	11000	6	12	< 20	516	722	51000	43
23-A	6900	3	10	24	361	520	30400	30
23-B	7100	4	10	< 20	371	529	28400	31
24-A	7700	3	10	34	388	535	27800	30
24-B	5600	3	10	42	277	500	24500	25
25-A	7800	3	11	< 20	346	520	22500	33
25-B	7800	3	12	20	338	564	21700	32
26-A	11000	4	14	26	1288	792	53500	48
26-B	13000	4	14	30	1264	751	53100	52
27-A	7600	4	12	20	347	536	25100	35
27-B	7800	4	11	45	438	536	29300	38
28-A	9500	3	12	24	673	678	37900	44
28-B	10000	4	12	24	807	705	42200	46

APPENDIX F-9-1 (Continued)

Station	PARAMETER							
	Aluminum (Al)	Arsenic (As)	Lead (Pb)	Mercury (Hg)(ppb)	Kjeldahl (N)	Phosphate (P)	Volatile Solids	Zinc (Zn)
29-A	6900	5	11	22	260	531	21500	31
29-B	6200	4	10	<20	251	582	19600	30
30-A	5400	3	10	26	232	432	15100	29
30-B	5600	3	10	46	230	455	18000	32
31-A	3100	4	8	40	82	676	14500	28
31-B	3000	5	8	42	69	614	13100	27
32-A	7000	3	10	38	258	543	27200	38
32-B	6700	3	10	36	251	536	26500	41
33-A	7900	4	11	16	426	587	31400	38
33-B	8000	4	11	24	458	584	35300	40
34-A	7000	4	9	<20	594	510	29900	33
34-B	6000	4	10	26	330	453	18800	28
35-A	11000	4	12	26	701	667	37800	43
35-B	10000	4	11	29	727	664	38800	44

2.4.7 Macrophytes

During the April 1976 sampling period, no aquatic macrophytes were observed. This absence of aquatic macrophytes is likely due to the fact that sampling occurred very early in the growing season.

2.4.8 Fish

Fish data from the April 1976 sampling are presented in Appendices F-10-1 through F-10-3. During the April 1976 sampling, a total of 64 fish representing seven species was captured in Yellow Creek and the White River. The most abundant species was flannelmouth sucker, and only one game fish species, mountain whitefish, was observed. The small number of fish caught can be attributed to the high flows and high turbidities encountered during the April 1976 sampling. Such high flows and turbidities generally reduced the efficiency of fishing efforts.

2.4.8 - Fish Data

APPENDIX F-10-1

LIST OF FISH SPECIES AND NUMBERS CAPTURED, WHITE RIVER AND LOWER YELLOW CREEK
RBOS AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX F-10-1

LIST OF FISH SPECIES AND NUMBERS CAPTURED, WHITE RIVER AND LOWER YELLOW CREEK, RBOSP AQUATIC BASELINE STUDIES, APRIL 1976

Common Name	Scientific Name	Number Captured
Mountain whitefish	*Prosopium williamsoni*	9
Flannelmouth sucker	*Catostomus latipinnis*	37
Bluehead sucker	*Catostomus discobolus*	3
Roundtail chub	*Gila robusta*	1
Speckled dace	*Rhinichthys osculus*	10
Fathead minnow	*Pimephales promelas*	1
Mottled sculpin	*Cottus bairdi*	3
Red Shiner	*Notropis lutrensis*	1

APPENDIX F-10-2

FISH DATA, WHITE RIVER AND YELLOW CREEK
RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX F-10-2

FISH DATA, WHITE RIVER AND YELLOW CREEK
RBOSP AQUATIC BASELINE STUDIES, APRIL 1976

Station Replicate	Date	Species	Length (mm)	Weight (gm)
20-1	4-20-76	Speckled dace	63	2.4
20-2	4-20-76	No fish captured		
21-1	4-20-76	No fish captured		
21-2	4-20-76	No fish captured		
22-1	4-20-76	Speckled dace	21	0.6
22-2	4-20-76	No fish captured		
23-1	4-16-76	Red shiner	60	1.5
		Flannelmouth sucker	429	665
		"	435	745
		"	462	876
		"	320	283
		"	358	383
		"	321	268
		Mountain whitefish	152	32
23-2	4-16-76	No fish captured		
24-1	4-12-76	No fish captured		
24-2	4-12-76	No fish captured		
25-1	4-12-76	Flannelmouth sucker	322	258
		"	491	957
25-2	4-12-76	No fish captured		
26-1	4-12-76	No fish captured		
26-2	4-12-76	No fish captured		
27-1	4-15-76	Flannelmouth sucker	357	446
		"	319	275
		"	307	246
		"	336	316
		"	327	312
		"	306	242
		"	286	194
		"	265	163
		"	244	121
		"	165	42.7
		"	175	46.1
		"	117	13.0
		"	109	11.0
		"	105	9.9
		"	92	6.9
		Mottled sculpin	106	19.0
		"	87	10.2

APPENDIX F-10-2 (Continued)

Station Replicate	Date	Species	Length (mm)	Weight (gm)
27-1 (Continued)		Mountain whitefish	143	25.4
		"	132	11.1
27-2	4-15-76	Flannelmouth sucker	467	893
		"	354	381
		"	354	371
		"	271	151
		Bluehead sucker	250	172
		Mountain whitefish	150	33.9
		"	147	34.4
		Flannelmouth sucker	104	10.4
		"	99	9.1
		"	120	6.1
		"	113	12.1
		"	108	11.4
		"	100	8.5
		"	96	7.5
		"	95	6.9
		Speckled dace	85	6.3
		"	69	3.2
		"	67	2.8
		"	34	0.4
		"	35	0.3
		"	33	0.2
		"	32	0.3
		"	32	0.2
		"	27	0.2
		"	29	0.1
		"	27	0.1
		Fathead minnow	38	0.4
28-1	4-15-76	Flannelmouth sucker	376	454
		"	426	701
		"	91	7.0
		"	91	6.7
		Mountain whitefish	127	17.5
		Mottled sculpin	94	1.8
		Speckled dace	38	0.5
		"	37	0.3
28-2	4-15-76	Flannelmouth sucker	135	27.3
29-1	4-15-76	No fish captured		
29-2	4-15-76	No fish captured		
30-1	4-13-76	Flannelmouth sucker	447	817
		"	501	1132
		"	455	791
		"	296	228
		"	164	41

APPENDIX F-10-2 (Continued)

Station Replicate	Date	Species	Length (mm)	Weight (gm)
30-2	4-13-76	No fish captured		
31-1	4-13-76	Flannelmouth sucker	444	740
		Bluehead sucker	323	367
31-2	4-13-76	No fish captured		
32-1	4-13-76	Flannelmouth sucker	317	308
		Bluehead sucker	309	325
		Roundtail chub	309	254
32-2	4-13-76	Mountain whitefish	143	23
33-1	4-14-76	Flannelmouth sucker	424	693
		"	484	1098
		Mountain whitefish	227	110
33-2	4-14-76	Flannelmouth sucker	246	137
		Speckled dace	45	0.8
		"	39	0.5
		"	37	0.4
		"	40	0.5
		"	38	0.5
34-1	4-14-76	Flannelmouth sucker	442	806
		"	403	595
		"	400	625
		"	321	277
34-2	4-14-76	Flannelmouth sucker	323	270
35-1	4-14-76	No fish captured		
35-2	4-14-76	No fish captured		

RBOSP PROGRESS REPO

APPENDIX F-10-3

RESULTS OF FOOD HABIT ANALYSES FOR INDIVIDUAL FISH
RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

RBOSP PROGRESS REP

APPENDIX F-10-3

RESULTS OF FOOD HABIT ANALYSES FOR INDIVIDUAL FISH
RBOSP AQUATIC BASELINE STUDIES, APRIL 1976

Station 23 Date 4-16-76

Species	Length (mm)	Weight (gm)	Food Items #	Food Items
Mountain whitefish	152	32	2	Chironomidae larvae
			1	Chironomidae pupa
			6	Hydroptilidae larvae
			39	*Ephemerella* nymphs
Flannelmouth sucker	429	665	163	Chironomidae larvae
			31	Chironomidae pupae
			4	Plecoptera nymphs
			1	Baetidae nymph
			1	Hydropsychidae larva
			94	*Ephemerella* nymphs
Flannelmouth sucker	435	745	64	Chironomidae larvae
			10	Chironomidae pupae
			3	Plecoptera nymphs
			3	Baetidae nymphs
			2	*Hydropsyche* numphs
			1	*Isoperla* nymph
			1	*Tricorythodes* nymph
			121	*Ephmerella* nymphs
Flannelmouth sucker	462	876	42	Chironomidae larvae
			5	Chironomidae pupae
			1	Simuliidae larva
			1	Hydroptilidae larvae
			1	*Tricorythodes* nympb
			8	*Ephemerella* nymphs
Flannelmouth sucker	320	283	127	Chironomidae larvae
			22	Chironomidae pupae
			5	Plecoptera nymphs
			2	Baetidae nymphs
			1	Hydropsychidae larva
			1	*Hydropsyche* larva
			1	Hydroptilidae larva
			66	*Ephemerella*
			1	Acari

APPENDIX F-10-3 (Continued)

Species	Length (mm)	Weight (gm)	Food Item #	Food Item
	Station 23		Date 4-16-76	
Flannelmouth sucker	358	383	45	Chironomidae larvae
			5	Chironomidae pupae
			7	Plecoptera nymphs
			2	Baetidae nymphs
			3	Hydropsychidae larvae
			4	*Hydropsyche* larvae
			1	Pyralidae larva
			1	*Isoperla* nymph
			71	*Ephemerella* nymphs
Flannelmouth sucker	321	268	2	Chironomidae larvae
	Station 25		Date 4-12-76	
Flannelmouth sucker	322	258	1	Empididae larva
			155	Chironomidae larvae
			8	Chironomidae pupae
			6	Baetidae nymphs
			2	*Hydropsyche* larvae
			14	*Ephemerella* nymphs
Flannelmouth sucker	491	957	2	Acari
			204	Chironomidae larvae
			13	Chironomidae pupae
			22	Plecoptera nymphs
			28	Baetidae nymphs
			4	Hydropsychidae larvae
			6	*Hydropsyche* larvae
			1	Hydroptilidae larva
			5	*Isoperla* nymphs
			1	*Tricorythodes* nymph
			112	*Ephemerella* nymphs
			1	*Heptagenia* nymph
	Station 27		Date 4-15-76	
Flannelmouth sucker	357	446	56	Chironomidae larvae
			21	Chironomidae pupae
			1	Plecoptera nymph
			2	Baetidae nymphs
			2	Hydropsychidae larvae
			12	*Ephemerella* nymphs

APPENDIX F-10-3 (Continued)

Station 27 Date 4-15-76

Species	Length (mm)	Weight (gm)	#	Food Item
Flannelmouth sucker	319	275	146	Chironomidae larvae
			17	Chironomidae pupae
			1	Plecoptera nymph
			8	Baetidae nymphs
			1	_Hydropsyche_ larva
			1	_Rhithrogena_ nymph
			14	_Ephemerella_ nymphs
Flannelmouth sucker	307	246	172	Chironomidae larvae
			40	Chironomidae pupae
			6	Plecoptera nymphs
			4	Hydropsychidae larvae
			1	Pyralidae larva
			37	_Ephemerella_ nymphs
Flannelmouth sucker	336	316	72	Chironomidae larvae
			23	Chironomidae pupae
			1	Plecoptera nymph
			1	Baetidae nymph
			2	Hydropsychidae larvae
			1	_Hydropsyche_ larva
			13	_Ephemerella_ nymphs
Flannelmouth sucker	327	312	58	Chironomidae larvae
			42	Chironomidae pupae
			2	Plecoptera nymphs
			2	Baetidae nymphs
			1	Hydropsychidae larva
			1	_Isoperla_ nymph
			1	_Rhithrogena_ nymph
			18	_Ephemerella_ nymphs
Flannelmouth sucker	306	242	92	Chironomidae larvae
			30	Chironomidae pupae
			1	Simuliidae pupa
			6	Plecoptera nymphs
			2	Baetidae nymphs
			3	Hydropsychidae larvae
			4	_Isoperla_ nymphs
			39	_Ephemerella_ nymphs

Station 27 Date 4-15-76

Species	Length (mm)	Weight (gm)	Food Item	
			#	
Flannelmouth sucker	286	194	20	Chironomidae larvae
			4	Chironomidae pupae
			1	Plecoptera nymph
			1	Baetidae nymph
			6	*Ephemerella* nymphs
Flannelmouth sucker	265	163	34	Chironomidae larvae
			14	Chironomidae pupae
			2	Plecoptera nymphs
			1	Hydropsychidae larva
			1	Pyralidae larva
			3	*Ephemerella* nymphs
Flannelmouth sucker	244	121	29	Chironomidae larvae
			18	Chironomidae pupae
			1	Baetidae nymph
			3	Hydropsychidae larvae
			19	*Ephemerella* nymphs
Flannelmouth sucker	467	893	97	Chironomidae larvae
			10	Chironomidae pupae
			1	Ceratopogonidae larva
			4	Plecoptera nymphs
			5	Baetidae nymphs
			4	Hydropsychidae larvae
			4	*Hydropsyche* larvae
			1	Pyralidae larva
			1	*Isoperla* nymph
			90	*Ephemerella* nymphs
Flannelmouth sucker	354	381	46	Chironomidae larvae
			38	Chironomidae pupae
			2	Plecoptera nymphs
			6	Baetidae nymphs
			9	Hydropsychidae larvae
			1	*Hydropsyche* larva
			30	*Ephemerella* nymphs
Flannelmouth sucker	354	371	129	Chironomidae larvae
			26	Chironomidae pupae
			2	Plecoptera nymphs
			4	Hydropsychidae larvae
			2	*Hydropsyche* larvae
			2	*Isoperla* nymphs
			32	*Ephemerella* nymphs

APPENDIX F-10-3 (Continued)

Species	Length (mm)	Weight (gm)	#	Food Item
	Station 27		Date 4-15-76	
Flannelmouth sucker	271	151	58	Chironomidae larvae
			23	Chironomidae pupae
			1	Baetidae nymph
			2	Hydropsychidae larvae
			1	*Hydropsyche* larva
			1	*Isoperla* nymph
			14	*Ephemerella* nymphs
			1	Acari
	Station 28		Date 4-13-76	
Flannelmouth sucker	376	454	64	Chironomidae larvae
			10	Chironomidae pupae
			3	Plecoptera nymphs
			3	Baetidae nymphs
			1	*Hydropsyche* larva
			1	*Isoperla* nymph
			17	*Ephemerella* nymphs
Flannelmouth sucker	426	701	37	Chironomidae larvae
			12	Chironomidae pupae
			2	Plecoptera nymphs
			1	Baetidae nymph
			1	Hydropsychidae larva
			1	*Hydropsyche* larva
			7	*Ephemerella* nymphs
	Station 30		Date 4-13-76	
Mountain whitefish	164	41	347	Chironomidae larvae
			14	Chironomidae pupae
			1	Simuliidae larva
			1	*Hydropsyche* larva
			19	Ephemerella nymphs
			1	Baetidae nymph

APPENDIX F-10-3 (Continued)

Station 30 Date 4-13-76

Species	Length (mm)	Weight (gm)	#	Food Item
Flannelmouth sucker	447	817	274	Chironomidae larvae
			44	Chironomidae pupae
			1	Ceratopogonidae larva
			9	Baetidae nymphs
			1	*Hydropsyche* larva
			1	*Baetis* nymph
			1	*Isoperla* nymph
			3	*Rhithrogena* nymphs
			84	*Ephemerella* nymphs
			1	Acari
Flannelmouth sucker	501	1132	81	Chironomidae larvae
			9	Chironomidae pupae
			1	Baetidae nymph
			2	*Hydropsyche* larvae
			1	Nematoda
			3	*Isoperla* nymphs
			1	*Rhithrogena* nymph
			25	*Ephemerella* nymphs
				Plant debris (roots)
Flannelmouth sucker	455	791	20	Chironomidae larvae
			4	Chironomidae pupae
			1	Plecoptera nymph
			1	Baetidae nymph
			1	*Hydropsyche* larva
Flannelmouth sucker	296	228	358	Chironomidae larvae
			33	Chironomidae pupae
			6	Baetidae nymphs
			17	*Ephemerella* nymphs

Station 31 Date 4-13-76

Species	Length (mm)	Weight (gm)	#	Food Item
Flannelmouth sucker	444	740	396	Chironomidae larvae
			21	Chironomidae pupae
			2	Plecoptera nymphs
			6	Baetidae nymphs
			1	Hydropsychidae larva
			5	*Hydropsyche* larvae
			1	Hydroptilidae larva
			1	*Isoperla* nymph
			1	*Rhithrogena* nymph
			55	*Ephemerella* nymphs
			1	Acari

APPENDIX F-10-3 (Continued)

	Station 32		Date 4-13-76	
Species	Length (mm)	Weight (gm)	Food Item #	
Mountain whitefish	143	23	229	Chironomidae larvae
			16	Chironomidae pupae
			7	*Ephemerella* nymphs
Flannelmouth sucker	317	308	339	Chironomidae larvae
			18	Chironomidae pupae
			1	Plecoptera nymph
			6	Baetidae nymphs
			1	Hydropsychidae larva
			1	*Isoperla* nymph
			26	*Ephemerella* nymphs
	Station 33		Date 4-14-76	
Mountain whitefish	227	110	498	Chironomidae larvae
			8	Chironomidae pupae
			1	Baetidae nymph
			5	*Hydropsyche* larvae
			1	*Rhithrogena* nymph
			4	*Ephemerella* nymphs
Flannelmouth sucker	424	693	1	*Deronectes* adult
			1	*Tabanus* larva
			1	Leptoceridae larva
			12	Chironomidae larvae
			20	Plecoptera nymphs
			12	Baetidae nymphs
			2	*Hydropsyche* larvae
			118	*Ephemerella* nymphs
Flannelmouth sucker	484	1098	57	Chironomidae larvae
			2	Chironomidae pupae
			18	Plecoptera nymphs
			30	Baetidae nymphs
			1	Hydropsychidae larva
			3	*Hydropsyche* larvae
			4	*Isogenus* larvae
			2	*Baetis* nymphs
			16	*Isoperla* nymphs
			4	*Rhithrogena* nymphs
			115	*Ephemerella* nymphs

APPENDIX F-10-3 (Continued)

Species	Length (mm)	Weight (gm)	#	Food Item
	Station 33		Date 4-14-76	
Flannelmouth sucker	246	137	85	Chironomidae larvae
			7	Chironomidae pupae
			3	Baetidae nymphs
			1	*Rhithrogena* nymph
			8	*Ephemerella* nymphs
	Station 34		Date 4-14-76	
Flannelmouth sucker	442	806	37	Chironomidae larvae
			2	Chironomidae pupae
			2	Plecoptera nymphs
			3	Baetidae nymphs
			1	Hydropsychidae larva
			2	*Hydropsyche* larvae
			1	*Isoperla* nymph
			1	*Rhithrogena* nymph
			62	*Ephemerella* nymphs
Flannelmouth sucker	403	595	83	Chironomidae larvae
			2	Chironomidae pupae
			2	Ceratopogonidae larvae
			6	Plecoptera nymphs
			2	Hydropsychidae larvae
			2	*Hydropsyche* larvae
			1	*Hydroptilidae* larva
			107	*Ephemerella* nymphs
			5	Baetidae nymphs
Flannelmouth sucker	400	625	863	Chironomidae larvae
			43	Chironomidae pupae
			1	Plecoptera nymph
			27	Baetidae nymphs
			2	Hydropsychidae larvae
			8	*Hydropsyche* larvae
			3	Pyralidae larvae
			5	*Baetis* nymphs
			1	Hydroptilidae larva
			4	Rhithrogena nymphs
			154	*Ephemerella* nymphs
			1	Acari

APPENDIX F-10-3 (Continued)

Station 34 Date 4-14-76

Species	Length (mm)	Weight (gm)	Food Item #	
Flannelmouth sucker	321	277	39	Chironomidae larvae
			3	Chironomidae pupae
			4	Plecoptera nymphs
			1	Hydropsychidae larva
			3	*Hydropsyche* larvae
			1	*Isoperla* nymph
			1	*Tricorythodes* nymph
			42	*Ephemerella* nymphs
			6	Baetidae nymphs
Flannelmouth sucker	323	270	318	Chironomidae larvae
			21	Chironomidae pupae
			2	Baetidae nymphs
			3	*Hydropsyche* larvae
			1	Hydroptilidae larva
			21	*Ephemerella* nymphs
			1	Acari

2.4.9 Springs and Seepages

Approximate locations of springs and seepages on or near Tract C-a are shown on Figure 2.4-2. No additional springs or seepages have been observed since Progress Report 6.

2.4.8 - Fish Data

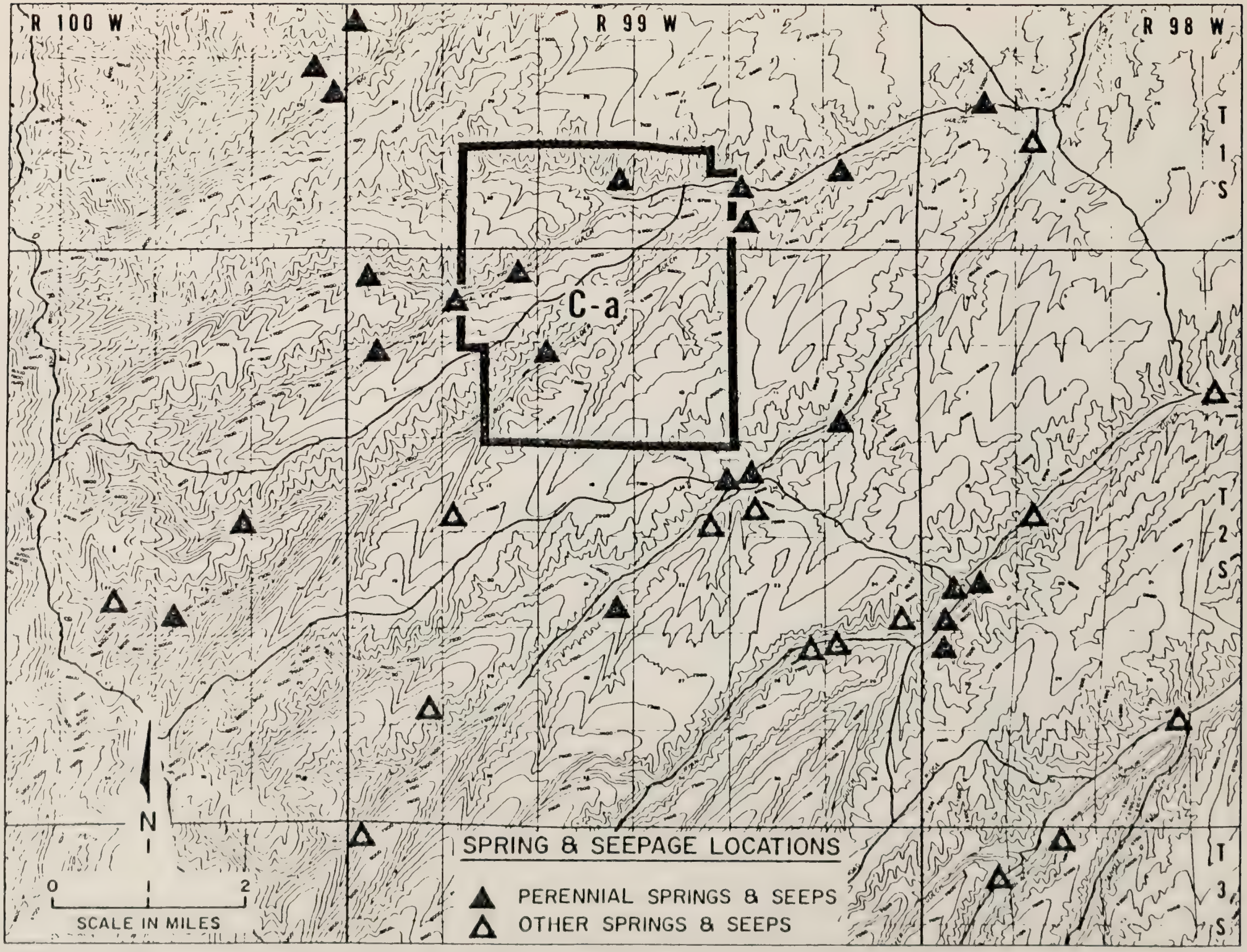

Figure 2.4-2. Spring and Seepage Locations

2.4.10 Hydrology

The approximate stream velocities observed during April 1976 are presented in Appendix F-11-1.

Stream velocities in April 1976 are generally similar to those observed in April 1975 although some variations were observed at certain sampling sites. Stream velocities in waters of the area have been observed to vary both seasonally and geographically.

2.4.10 - Hydrology Data

RBOSP PROGRESS

APPENDIX F-11-1

STREAM FLOW
RBOSP AQUATIC BASELINE STUDIES
APRIL 1976

APPENDIX F-11-1

STREAM FLOW, RBOSP AQUATIC BASELINE STUDIES, APRIL 1976.[1]
(Results are expressed in feet per second and, where appropriate, are given for bank sides (s) and point of maximum flow (m).)

Station	Flow (ft/sec)		
	s	m	s
2		1.0	
3		0.7	
4		0.8	
5		1.2	
7		1.5	
8		0.9	
9		1.4	
13		1.4	
14		1.2	
15		0.3	
17		0.4	
18		0.8	
19		2.8	
20		1.1	
21		0.9	
22		0.8	
23	2.2;	2.5;	2.3
24	2.5;	1.4;	2.2
25	2.9;	2.5;	2.5
26	1.0;	2.0;	1.7
27	1.2;	1.0;	0.7
28	2.6;	1.5;	1.5
29	2.8;	3.9;	1.9
30	2.1;	2.3;	1.2
31	2.3;	2.7;	2.1
32	1.3;	2.1;	2.4
33	1.6;	2.1;	1.4
34	2.1;	2.7;	2.3
35	1.5;	3.9;	4.0

---

[1] Stations 1, 6, 10-12, and 16 were dry or inaccessible at the time of sampling.

2.4.11 Miscellaneous Studies

Data from the February 1976 White River water quality sampling are presented in Appendices F-12-1 through F-12-4.

During February 1976, concentrations of parameters included in the water quality studies of the White River were within both the maximum allowable and the recommended limiting concentrations for chemical parameters in drinking water (U.S. Public Health Service, 1962).

2.4.10 - Hydrology Data

2.4.11 - Miscellaneous Studies Data

Literature Cited

Rio Blanco Oil Shale Project, 1976. Progress Report 2, Aquatic Studies. Gulf Oil Corporation and Standard Oil (Indiana). Denver, Colorado.

United States Public Health Service. 1962. Drinking water standards. Public Health Service Publication 986. 61 pp.

RBOSP PROGRESS REPORT

APPENDIX F-12-1

WATER QUALITY DATA, SPECTROGRAPHIC ELEMENT SCAN
RBOSP AQUATIC BASELINE STUDIES
FEBRUARY 1976

APPENDIX F-12-1

WATER QUALITY DATA, FEBRUARY 1976. SPECTROGRAPHIC ELEMENT SCAN RBOSP AQUATIC BASELINE STUDIES. (Data are expressed in µg/g and are based upon dissolved solids.)

Parameter	Station Replicate 25 A	25 B	34 A	34 B
Aluminum (Al)	2.5	2.5	2.8	3.0
Antimony (Sb)	ND	ND	ND	ND
Arsenic (As)	ND	ND	ND	ND
Barium (Ba)	0.04	0.02	0.05	0.03
Beryllium (Be)	ND	ND	ND	ND
Bismuth (Bi)	ND	ND	ND	ND
Boron (B)	4.5	4.4	5.0	5.3
Cadmium (Cd)	ND	ND	ND	ND
Calcium (Ca)	178	175	199	210
Chromium (Cr)	0.007	0.006	0.007	0.008
Cobalt (Co)	0.004	0.004	0.004	0.004
Copper (Cu)	0.01	0.01	0.01	0.01
Germanium (Ge)	ND	ND	ND	ND
Iron (Fe)	0.17	0.16	0.19	0.20
Lead (Pb)	0.004	0.004	0.005	0.005
Magnesium (Mg)	43	42	48	51
Manganese (Mn)	0.02	0.02	0.02	0.02
Molybdenum (Mo)	ND	ND	ND	ND
Nickel (Ni)	0.004	0.004	0.004	0.004
Potassium (K)	8.0	7.8	8.9	9.4
Silica (Si)	11	11	13	13
Silver (Aq)	0.009	0.009	0.01	0.01
Sodium (Na)	71	70	79	84
Strontium (Sr)	8.2	8.0	9.1	9.6
Tellurium (Te)	ND	ND	ND	ND
Tin (Sn)	ND	ND	ND	ND
Titanium (Ti)	0.009	0.008	0.01	0.01
Vanadium (V)	ND	ND	ND	ND
Wolfram (W)	ND	ND	ND	ND
Zinc	ND	ND	ND	ND
Zirconium (Zr)	ND	ND	ND	ND

ND = Not Detected

APPENDIX F-12-2

WATER QUALITY DATA
RBOSP AQUATIC BASELINE STUDIES
FEBRUARY 1976

APPENDIX E-12-2

WATER QUALITY DATA, RBOSP AQUATIC BASELINE STUDIES FEBRUARY, 1976. (Data are expressed in mg/l unless otherwise noted.)

PARAMETER	STATION REPLICATE 25 A	25 B	34 A	34 B
Arsenic (As), Diss	< 0.01	< 0.01	< 0.01	< 0.01
Barium (Ba), Diss	< 0.1	< 0.1	< 0.1	< 0.1
Boron (Bo), Diss	< 0.5	< 0.5	< 0.5	< 0.5
Cadmium (Cd), Diss	< 0.01	< 0.01	< 0.01	< 0.01
Carbon (C), Organic	1	< 1	10	2
Carbon (C), Organic Diss	1	1	2	2
Carbon (C), Organic Suspended	< 1	< 1	8	< 1
Chemical Oxygen Demand (O_2)	11	11	11	11
Chromium (Cr), Total Diss	< 0.03	< 0.03	< 0.03	< 0.03
Copper (Cu), Diss	< 0.02	< 0.02	< 0.02	< 0.02
Cyanide (Cn), Total	< 0.001	< 0.001	< 0.001	< 0.001
Fluoride (F), Diss	0.14	0.16	0.14	0.14
Iron (Fe), Total Diss	0.02	0.03	0.03	0.03
Lead (Pb), Diss	< 0.05	< 0.05	< 0.05	< 0.05
Lithium (Li), Diss	0.04	0.04	0.03	0.03
Manganese (Mn), Diss	< 0.02	< 0.02	< 0.02	< 0.02
Mercury (Hg), Diss (µg/l)	< 0.2	< 0.2	< 0.2	< 0.2
Nitrogen (N), Organic	0.37	0.35	0.38	0.44
Phosphorus (P), Total Diss	0.04	0.04	0.07	0.05
Phenolic compounds (Phenol)	0.006	0.011	0.008	0.008
Selenium (Se), Diss	< 0.01	< 0.01	< 0.01	< 0.01
Solvent extract (Oil)	0.54	< 0.003	< 0.003	< 0.003
Sulfate (S), Diss	54	53	53	53
Sulfide (S), Diss	< 0.02	< 0.02	< 0.02	< 0.02
Sulfur (S), Organic	< 1	< 1	< 1	< 1
Zinc (Zn), Diss	0.04	< 0.02	0.05	0.03

Diss = Dissolved

APPENDIX F-12-3

WATER QUALITY DATA, SELECTED PESTICIDE ANALYSES
RBOSP AQUATIC BASELINE STUDIES
FEBRUARY 1976

APPENDIX F-12-3

WATER QUALITY DATA, SELECTED PESTICIDE ANALYSES
RBOSP AQUATIC BASELINE STUDIES, FEBRUARY, 1976

(Data are expressed in mg/1.)

Parameter	Station Replicate			
	25		34	
	A	B	A	B
Lindane	<0.0001	<0.0001	<0.0001	<0.0001
Malathion	<0.0005	<0.0005	<0.0005	<0.0005
Parathion	<0.0001	<0.0001	<0.0001	<0.0001
Toxaphene	<0.002	<0.002	<0.002	<0.002

APPENDIX F-12-4

FECAL COLIFORM BACTERIAL ANALYSES
RBOSP AQUATIC BASELINE STUDIES
FEBRUARY 1976

APPENDIX F-12-4

FECAL COLIFORM BACTERIAL ANALYSES
RBOSP AQUATIC BASELINE STUDIES, FEBRUARY, 1976

Station Replicate	Colonies/100 ml
25-A	13
25-B	12
34-A	5
34-B	6

2.5 Other Environmental Studies

MISCELLANEOUS ENVIRONMENTAL STUDIES
on
FEDERAL OIL SHALE TRACT C-a

Prepared for:

Rio Blanco Oil Shale Project

Prepared by:

CDM/Limnetics
Denver, Colorado

July 1976

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2.5 Other Environmental Programs

2.5.1 Soils Survey and Productivity Assessment Studies

2.5.1.1 Objectives

The surface and subsurface soils studies are designed to fulfill the requirements of the oil shale lease, provide data necessary in the determination of ecosystem relationships and provide information required for designing a successful revegetation plan of disturbed areas.

Soil survey and productivity assessment studies are divided into three distinct projects: 1) a preliminary survey of soils of Tract C-a and vicinity and preparation of a soils map (this portion of the soils studies has been completed and is discussed in the RBOSP Annual Report, 1976), 2) drilling for surface and subsurface soils (this portion of the study has been completed and a preliminary discussion of the data is included in this report) and 3) an intensive study program of surface soils of Tract C-a and vicinity (this program is about 65 percent complete).

Consult previous progress reports for a more complete description of objectives of the soil program.

2.5.1.2 Methods

Two methods were used to collect surface soil samples. One method consisted of sampling soils from the face of a soil sampling pit. A trench 45 cm (18 in) wide, 1.5 m (5 ft) long and 1.5 m deep was dug at each sampling site. A 1500-g soil sample was taken at four depths throughout the upper 1.5 m of the soil profile.

The second method, compatible with the method used for subsurface soil sampling, employed the use of a 5-cm (2-in) diameter split spoon sampler. Composite surface soil samples were collected from the surface to 140 cm (4.5 ft) at 45-cm (1.5 ft) increments. This method was used to obtain comparative data on surface and subsurface soils.

Subsurface soils, soils below 1.4 m, were also collected with a 5-cm diameter split spoon sampler. Forty-five centimeter composite soil samples were taken at 3 to 4.5-m intervals from a depth of 1.4 m to bedrock.

Drilling for surface and subsurface soil samples was done with a CME-75 truck-mounted drill. Soil samples were taken with a 5-cm diameter split spoon. Drilling site locations are presented in Figure 2.5.1-1.

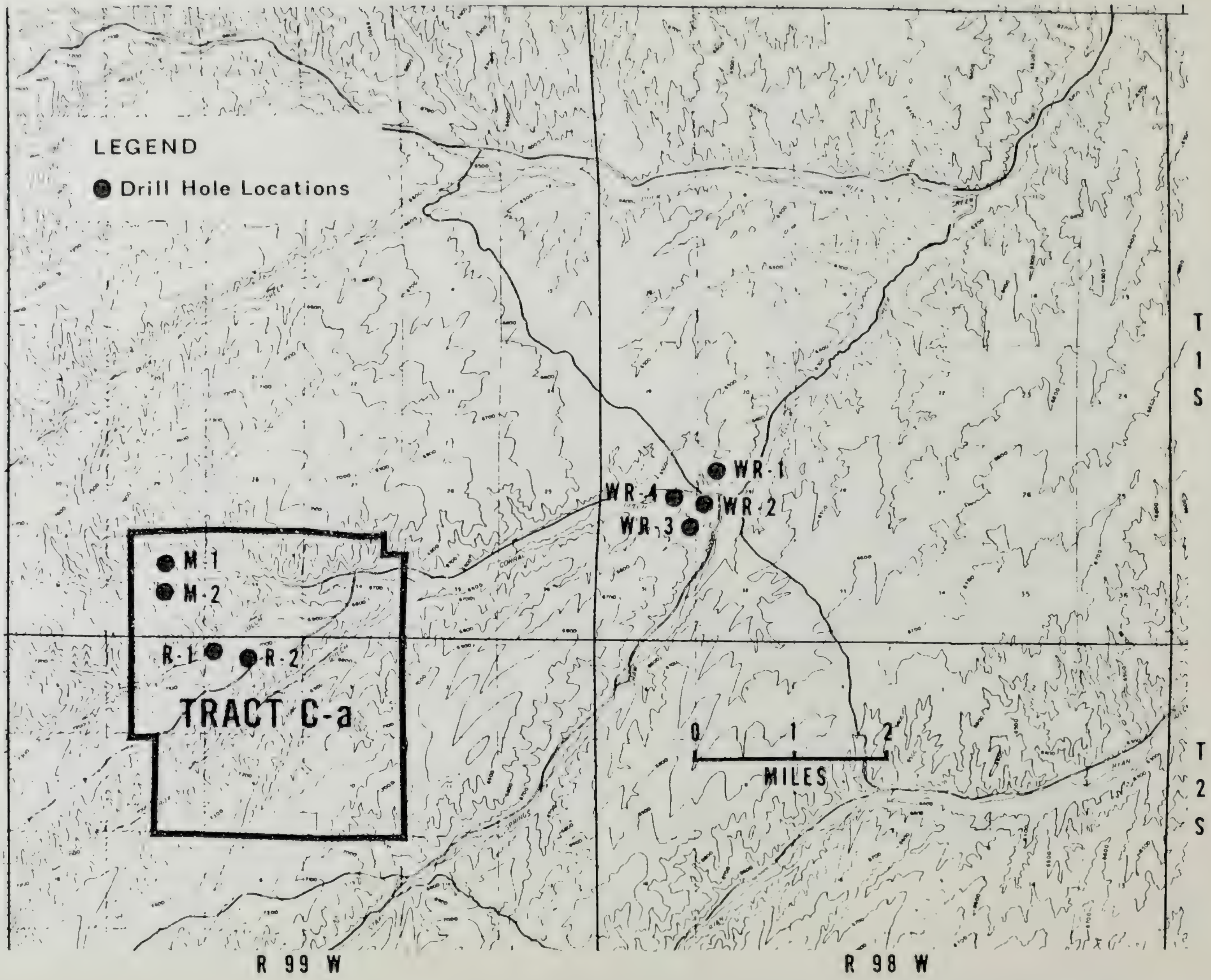

Figure 2.5.1-1. Soil Investigation Drill Hole Locations for Surface and Subsurface Soil Studies.

Further discussions of methods used in soils sampling may be found in previous progress reports. A detailed description of chemical analysis methodology will be presented in the final report.

2.5.1.3 Results and Discussion

The preliminary soils map of Tract C-a, prepared by the SCS, is undergoing further revisions. A general description of the soil series, soil associations and rock outcrops encountered during surveying and mapping by the SCS are discussed in the RBOSP Annual Report, 1976.

Drilling for surface and subsurface soils samples using the 5 cm split spoon sampler has been completed. A summary of the results of the chemical and radiological analyses on surface and subsurface soils collected by the split spoon sampling technique are presented in Table 2.5.1-1. More complete data are presented in Appendix 2.5.1-1.

Approximately 65 percent of the field work of the surface soils sampling program has been completed, with field work completed on Tract C-a and Colorado Division of Wildlife land in the vicinity of Tract C-a. Chemical and physical analyses of these soils samples have been partially completed. Completion of the remaining portion of the field work on soils in the vicinity of the tract was delayed until receipt of a special land use permit from the Bureau of Land Management. The permit has now been received and the remaining locations will be sampled during the eighth quarter of study.

The depth of soil to bedrock on tract is quite variable and averages 3 m (∿ 10 ft) on the slope to 7.5 m (∿ 25 ft) in the valley bottoms. These soils are composed of a mixture of sandy silt, sandy clay and gravelly clay. Surface and subsurface soils are slightly basic (average pH of 8.4 to 8.5). Organic matter content of these soils is moderate to low in both surface (2.57%) and subsurface (1.94%) soils, with the maximum levels of organic matter (5%) in the surface 45 cm of soil. Cation exchange capacity (CEC) for soils of this semi-arid region is normal, with the CEC of surface soils (CEC = 27.1) slightly higher than subsurface soils (CEC = 22.7). There are essentially no chemical differences between surface and subsurface soils on tract (Table 2.5.1-1). Results of chemical analyses of on-tract soils reveal that only traces of potentially toxic elements occur in the surface and subsurface soils. Of the elements analyzed, only chromium (total chromium ≈ 45 to 50 ppm) is close to potentially toxic levels (Pratt 1966). Conversely, both surface and subsurface soils are slightly deficient in several of the macro and micronutrients (e.g., nitrogen, phosphorous, manganese, iron, zinc, molybdenum).

Table 2.5.1-1. Summary of preliminary chemical and radiological data[1] of surface (0 to 1.4 m) and subsurface (1.4 m to bedrock) soils of Tract C-a and water reservoir site. Mean ($\bar{x}$) and standard deviation (SD) values are in µg/g (ppm) unless otherwise noted; n = sample size.

	ON-TRACT		WATER RESERVOIR	
	Surface	Subsurface	Surface	Subsurface
	$\bar{x}$(SD,n)	$\bar{x}$(SD,n)	$\bar{x}$(SD,n)	$\bar{x}$(SD,n)
Ammonium	27(7,11)	26(6,20)	21(9,10)	31(9,17)
Nitrate	10.5(7.7,11)	8.5(5.7,19)	24.2(37.7,10)	7.6(4.1,16)
Molybdenum				
Anion Exchangeable	.27(.27,11)	<.30(.22,20)	.34(.33,10)	1.51(4.44,17)
Gypsum (MEQ/100g)	-0-	-0-	.15(.4,10)	.1(.3,17)
Lime (lbs. $CaCO_3$/Acre)	-0-	-0-	-0-	-0-
Selenium Available (ppb)	42(38,12)	35(42,20)	27(17,10)	60(75,17)
Phosphorous				
Total	658(167,12)	673(82,20)	526(128,10)	566(89,17)
$NaHCO_2$ Extractable	10(6,12)	10(3,20)	9(8,10)	12(7,17)
Organic Matter (%)	2.57(1.11,12)	1.94(.66,20)	2.36(1.73,10)	1.14(1.25,17)
pH				
In Water	8.5(.3,12)	8.4(.2,20)	8.4(.3,10)	8.5(.4,17)
In 0.01M $CaCl_2$	8.1(.2,12)	8.2(.3,20)	8.1(.1,10)	8.2(.4,17)
Soluble Salt (mmhos/cm)				
Elec. Conductivity	1.39(1.86,12)	1.49(2.36,20)	.39(.12,10)	.52(.23,17)
Sodium				
Exchangeable (%)	11.3(12.1,12)	7.8(5.7,20)	5.6(4.5,10)	7.2(5.2,17)
Water Soluble (MEQ/100g)	1.81(2.60,12)	1.55(2.50,20)	.39(.24,10)	.65(.46,17)
NH_4 Acetate Soluble (MEQ/100g)	4.79(5.44,12)	3.33(3.87,20)	1.85(1.15,10)	2.22(1.44,17)
Cation Exchange Capacity (MEQ/100g)	27.1(4.5,12)	22.7(3.3,20)	28.4(6.7,10)	23.4(4.8,17)
Total				
Arsenic	8(4,12)	8(2,20)	4(2,10)	3(2,17)
Cadmium	<0.5	<0.5	<0.5	<0.5
Chloride (%)	.22(.07,12)	.20(.05,20)	.18(.07,10)	.20(.08,17)
Chromium	41(2,12)	40(4,20)	47(4,10)	52(11,17)
Cobalt	6(.5,12)	6(1,20)	6(.5,10)	7(1,17)
Fluoride	407(154,12)	374(99,20)	307(70,10)	256(120,17)
Mercury (ppb)	26(9,12)	28(9,20)	20(8,10)	23(12,17)
Antimony	<1	<1	<1	<1
Vanadium	68(25,12)	59(10,20)	52(10,10)	52(7,17)

Table 2.5.1-1 (Continued)

	ON-TRACT		WATER RESERVOIR	
	Surface	Subsurface	Surface	Subsurface
	$\bar{x}$(SD,n)	$\bar{x}$(SD,n)	$\bar{x}$(SD,n)	$\bar{x}$(SD,n)
Water Soluble				
Magnesium	58(92,12)	90(156,20)	21(18,10)	37(34,17)
Calcium	67(33,12)	120(205,20)	62(26,10)	50(41,17)
Potassium	36(38,12)	21(15,20)	15(8,10)	16(11,17)
Boron	1.2(.5,12)	< .8(.5,20)	< .8(.3,10)	< .8(.4,17)
Sulfate	707(1354,12)	984(1882,20)	94(74,10)	205(189,17)
DTPA Extractable				
Copper	2.1(.8,12)	2.8(.8,20)	2.2(1.9,10)	2.6(2.6,17)
Manganese	42(11,12)	28(10,20)	53(26,10)	38(22,17)
Iron	117(45,12)	122(32,20)	139(48,10)	148(47,17)
Zinc	1.1(.4,12)	1.2(.3,20)	1.0(.4,10)	1.1(.7,17)
NH_4 Acetate Extractable				
Nickel	1.0(.2,12)	.9(.2,20)	1.0(.2,10)	.9(.2,17)
Lead	.5(.1,12)	.4(.1,20)	.3(.1,10)	.3(.2,17)
Potassium	341(267,12)	167(48,20)	199(140,10)	167(152,17)
Background Radioactivity				
Uranium	3(.9,12)	4(1,20)	4(1,10)	3(2,17)
Equivalent Uranium	3(.5,11)	3(1,20)	3(1,10)	3(1,17)
Equivalent Thorium	8(3,11)	9(2,20)	11(3,10)	12(3,17)
Radium^{266} (Picocuries per g)	1.1(.2,11)	1.1(.3,20)	1.0(.4,10)	1.1(.2,17)
Potassium (%)	2.3(.3,11)	2.5(.2,20)	2.6(.3,10)	2.6(.2,17)

---

[1] Samples collected with a 5-cm diameter split spoon from four drilling sites on Tract C-a and four sites in proposed water quality control reservoir area.

The alluvium in the proposed water quality control dam site in Corral Gulch is up to 23 m (∿ 75 ft) deep in the main channel and is composed of sandy silt, sandy clay and silty sand. Soils from the water reservoir area do not differ in chemical composition from soils on tract.

Permeability of the surface and subsurface soil waste dump material will be high initially but will decrease with depth as the height of the disposal pile is increased. Two factors will contribute to the decrease in permeability with depth of the disposal pile: 1) the waste material at the bottom of the dump will be the soil and partly decomposed sandstone, mudstone and marlstone from the mine surface with a high percentage of fines and sand produced in mining, hauling and dumping and 2) as the load of waste material increases on the material nearer the bottom of the dump, compaction and some consolidation will take place, reducing porosity.

It is recommended that any reclamation practice of spoil piles, whether topped off with surface or subsurface soils, include the addition of certain soil amendments such as organic matter (mulch) and fertilizers containing at least the macronutrients. Although concentrations of certain micronutrients in the soil may be slightly low, it is not recommended at this time that these elements be included in reclamation fertilization programs.

Soils from the water reservoir area do not differ in chemical composition from soils on tract and may be utilized as needed for reclamation. Since the water reservoir area does not contain toxic levels of elements, leaching losses of elements to surface water or groundwater systems should pose no threat to the environment.

Literature Cited

Pratt, Parker F. 1966. Chromium. Pages 136-141 in Homer D. Chapman, ed. Diagnostic Criteria for Plants and Soils. Quality Printing Company, Inc., Abilene, TX.

APPENDIX 2.5.1-1

Tables 1 to 4. Preliminary chemical and radiological analyses of surface (0 to 1.4 m) and subsurface (1.4 m to bedrock) soils of Tract C-a and water reservoir site. Samples collected with a 5-cm diameter split spoon from four drilling sites on Tract C-a and four sites in proposed water quality control reservoir area.

Tract C-a (R-1, R-2, M-1, M-2)
  R-1 and M-1 are Glendive fine sandy loam soils
  R-2 is a Rentsac-Piceance complex
  M-2 is a Rentsac channery fine sandy loam soil

Water Reservoir Site (WR-1 and WR-2)
  Information on thses soil types is not currently available.

Chemical Analyses of Overburden Intervals

Sample No.	Drill Hole No.	Interval, ft From	Interval, ft To	pH in Water(1)	pH in 0.01M $CaCl_2$(2)	Soluble Salt Electrical Conductivity(1) mmhos/cm	Sodium Water Soluble(1) (milliequivalents/100 g)	Sodium NH_4 Acetate Soluble (milliequivalents/100 g)	Cation Exchange Capacity (milliequivalents/100 g)	Exchangeable Sodium Percentage(3)
1	R-1	0	1.5	8.1	8.0	0.51	0.20	1.04	31.4	2.7
2	R-1	1.5	3.0	8.7	8.3	1.40	2.02	5.62	29.2	12.3
3	R-1	3.0	4.5	8.5	8.4	3.70	5.57	10.70	30.1	17.0
4	R-1	4.5	6.0	8.4	8.1	8.40	7.83	13.20	25.6	21.1
5	R-1	9.5	11.0	8.2	8.3	6.25	6.09	11.80	25.9	22.0
6	R-1	14.5	16.0	8.6	8.6	0.94	1.03	2.76	26.3	6.6
7	R-1	19.5	21.0	8.4	8.2	0.51	0.39	1.69	24.5	5.3
8	R-1	24.5	26.0	9.0	8.8	0.36	0.33	1.52	19.4	6.1
9	R-1	29.5	31.0	8.4	8.1	0.36	0.30	0.62	26.3	1.2
10	R-1	34.5	36.0	8.2	8.0	0.43	0.38	1.47	23.4	4.7
11	R-1	39.5	41.0	8.3	8.0	0.32	0.23	1.34	23.6	4.7
12	R-1	44.5	46.0	8.5	8.1	0.33	0.29	1.34	24.1	4.4
13	R-1	49.5	51.0	8.3	8.0	0.36	0.32	1.52	18.5	6.5
14	R-1	54.5	56.0	8.4	8.0	0.33	0.27	1.29	20.7	4.9
15	R-1	59.5	61.0	8.2	8.0	0.40	0.32	1.47	27.9	4.1
16	R-1	64.5	66.0	8.2	8.0	0.37	0.31	1.47	20.3	5.7
17	R-1	69.5	71.0	8.2	7.9	0.39	0.30	1.34	27.9	3.7
18	WR-1	0	0.8	8.5	8.2	0.23	0.17	1.47	25.9	5.0
19	WR-1	3.0	3.5	9.1	8.3	0.37	0.77	4.82	23.0	17.6
20	WR-1	5.0	6.0	8.3	8.2	1.24	2.23	6.82	20.5	22.4
21	WR-1	9.0	9.3	8.4	8.3	0.75	1.15	4.55	23.2	14.7
22	R-2	0	1.5	8.0	7.9	0.25	0.07	4.46	33.4	13.1
23	R-2	1.5	3.0	8.5	8.0	0.33	0.51	1.87	29.0	4.7
24	R-2	3.0	4.3	8.9	8.4	0.92	1.74	5.31	23.9	14.9
25	WR-2	0	1.5	8.1	8.0	0.50	0.20	1.16	30.8	3.1
26	WR-2	1.5	3.0	8.3	8.0	0.38	0.26	1.25	30.0	3.3
27	WR-2	3.0	4.5	8.2	8.0	0.50	0.35	1.43	33.0	3.3
28	WR-2	4.5	6.0	8.2	8.1	0.46	0.46	1.61	28.5	4.0
29	WR-2	16.0	17.5	8.4	8.2	0.53	0.50	1.47	27.4	3.5
30	WR-2	31.0	32.5	8.4	8.1	0.41	0.37	1.52	18.7	6.1
31	WR-2	41.0	42.5	8.6	8.1	0.41	0.41	1.83	19.4	7.3
32	WR-2	46.0	47.5	8.5	8.1	0.49	0.50	1.69	28.3	4.2
33	WR-2	61.0	62.5	8.3	7.9	0.49	0.47	1.61	27.4	4.2
34	WR-3	0	1.5	8.2	7.9	0.27	0.13	0.94	27.9	2.9
35	WR-3	1.5	3.0	8.4	8.0	0.22	0.16	1.07	22.5	4.0
36	WR-3	3.0	4.5	8.8	8.1	0.40	0.62	2.14	18.9	8.0
37	WR-3	4.5	6.0	8.6	8.2	0.65	0.92	3.12	18.3	12.0
38	WR-3	10.5	10.9	10.0	9.6	0.36	0.54	2.72	18.1	12.0
39	WR-4	0	1.5	8.3	8.0	0.55	0.68	2.41	42.8	4.0
40	WR-4	2.0	3.5	8.4	8.1	0.50	0.54	1.78	28.8	4.3
41	WR-4	6.0	7.5	8.6	8.3	0.60	0.60	1.92	29.4	4.5
42	WR-4	17.0	18.5	8.5	8.1	0.46	0.48	1.47	18.5	5.4
43	WR-4	31.5	33.0	8.5	8.0	0.40	0.39	1.34	19.6	4.8
44	WR-4	41.5	43.0	8.3	8.0	0.48	0.41	1.38	23.9	4.1
45	WR-4	51.5	53.0	7.9	7.9	1.17	0.68	1.52	29.2	2.9
46	WR-4	66.5	68.0	8.2	8.1	0.65	0.54	1.47	29.4	3.2
47	WR-4	71.5	73.0	8.3	8.0	0.34	0.34	1.69	17.2	7.8
48	M-1	0.5	1.5	8.3	8.0	0.36	0.23	1.25	23.4	4.4
49	M-1	2.0	3.0	8.2	8.0	0.33	0.23	1.25	21.0	4.9
50	M-1	3.5	4.5	8.4	7.9	0.30	0.26	1.25	19.8	5.0
51	M-1	5.0	6.0	8.3	7.8	0.60	0.50	1.61	20.5	5.4
52	M-1	10.5	12.0	8.3	8.0	0.44	0.36	1.52	21.0	5.5
53	M-1	15.5	16.5	8.3	8.0	0.38	0.28	1.47	21.2	5.6
54	M-2	0	1.5	8.1	7.9	0.30	0.09	0.49	32.2	1.2
55	M-2	1.5	3.0	8.5	8.3	1.89	2.52	4.99	27.6	8.9
56	M-2	3.0	4.5	8.6	8.5	6.35	8.30	19.30	23.9	46.0
57	M-2	4.5	6.0	8.6	8.5	5.60	7.43	10.70	22.3	14.7
58	M-2	11.5	13.0	8.9	8.5	2.29	3.22	6.02	18.9	14.8
59	M-2	16.5	18.0	8.7	8.1	0.64	0.86	2.41	16.4	9.5

1/ Sample to extract ratio: 1 to 2.

2/ Sample to extract ratio: 1 to 5.

3/ Calculated from the equation: Exchangeable Sodium Percentage = $\frac{100(\text{Na, } NH_4 \text{ Acetate Soluble-Na, Water Soluble})}{\text{Cation Exchange Capacity}}$

Chemical Analyses of Overburden Intervals

Sample No.	Drill Hole No.	Interval, ft From	Interval, ft To	Total Phosphorus ppm	Total Arsenic ppm	Total Cadmium ppm	Total Chloride %	Total Chromium ppm	Total Cobalt ppm	Total Fluoride ppm	Total Mercury ppb	Total Antimony ppm	Total Vanadium ppm	Selenium Available ppb	Phosphorus NaHCO$_3$ Extractable ppm
1	R-1	0	1.5	896	5	<0.5	0.35	45	6	390	29	<1	57	20	24
2	R-1	1.5	3.0	889	8	<0.5	0.34	45	6	580	20	<1	64	40	9
3	R-1	3.0	4.5	747	8	<0.5	0.16	40	6	520	24	<1	64	90	12
4	R-1	4.5	6.0	689	8	<0.5	0.11	40	8	470	21	<1	62	90	16
5	R-1	9.5	11.0	684	8	<0.5	0.21	40	6	360	18	1	53	150	13
6	R-1	14.5	16.0	744	8	<0.5	0.18	40	6	420	21	<1	60	40	14
7	R-1	19.5	21.0	708	5	<0.5	0.18	45	5	420	19	<1	59	20	11
8	R-1	24.5	26.0	862	8	<0.5	0.24	35	5	420	23	1	58	20	13
9	R-1	29.5	31.0	705	8	<0.5	0.23	35	6	440	17	<1	47	10	12
10	R-1	34.5	36.0	672	7	<0.5	0.17	40	6	390	25	<1	48	10	11
11	R-1	39.5	41.0	648	8	<0.5	0.25	35	5	450	22	<1	64	10	8
12	R-1	44.5	46.0	635	8	<0.5	0.19	40	5	350	28	<1	63	20	11
13	R-1	49.5	51.0	635	5	<0.5	0.15	40	4	500	30	1	47	10	10
14	R-1	54.5	56.0	681	10	<0.5	0.26	40	5	460	27	1	66	20	11
15	R-1	59.5	61.0	699	8	<0.5	0.20	40	6	300	28	<1	57	10	14
16	R-1	64.5	66.0	687	8	<0.5	0.15	40	5	380	28	1	49	10	11
17	R-1	69.5	71.0	632	5	<0.5	0.24	45	4	100	30	<1	52	20	8
18	WR-1	0	0.8	412	4	<0.5	0.06	50	5	250	20	<1	43	10	7
19	WR-1	3.0	3.5	466	1	<0.5	0.11	55	6	260	13	<1	44	<10	2
20	WR-1	5.0	6.0	651	4	<0.5	0.11	90	9	320	14	<1	60	20	3
21	WR-1	9.0	9.3	496	1	<0.5	0.16	50	6	60	55	<1	53	30	3
22	R-2	0	1.5	463	4	<0.5	0.18	40	6	30	15	<1	55	20	7
23	R-2	1.5	3.0	427	3	<0.5	0.14	45	5	400	14	<1	58	<10	6
24	R-2	3.0	4.3	539	5	<0.5	0.19	40	5	390	18	<1	56	40	19
25	WR-2	0	1.5	735	5	<0.5	0.19	45	6	380	22	<1	65	40	26
26	WR-2	1.5	3.0	672	4	<0.5	0.24	45	5	230	22	<1	44	50	8
27	WR-2	3.0	4.5	693	8	<0.5	0.17	45	6	430	27	<1	62	50	11
28	WR-2	4.5	6.0	689	5	<0.5	0.37	45	6	260	20	<1	47	40	14
29	WR-2	16.0	17.5	645	1	<0.5	0.26	40	5	350	17	<1	34	20	18
30	WR-2	31.0	32.5	584	3	<0.5	0.22	50	8	210	16	<1	48	10	10
31	WR-2	41.0	42.5	629	5	<0.5	0.13	45	8	270	16	<1	55	<10	12
32	WR-2	46.0	47.5	599	4	<0.5	0.24	50	9	280	18	<1	47	90	28
33	WR-2	61.0	62.5	690	5	<0.5	0.27	50	8	360	24	<1	47	40	25
34	WR-3	0	1.5	508	3	<0.5	0.27	45	5	260	12	<1	40	20	5
35	WR-3	1.5	3.0	421	1	<0.5	0.21	45	5	290	12	<1	45	10	3
36	WR-3	3.0	4.5	384	3	<0.5	0.24	50	6	270	9	<1	65	10	3
37	WR-3	4.5	6.0	439	3	<0.5	0.09	50	8	30	8	<1	58	20	2
38	WR-3	10.5	10.9	466	5	<0.5	0.22	50	8	30	13	<1	58	10	6
39	WR-4	0	1.5	447	8	<0.5	0.13	45	6	400	34	<1	57	30	23
40	WR-4	2.0	3.5	526	5	<0.5	0.22	45	6	300	28	<1	55	40	6
41	WR-4	6.0	7.5	641	3	<0.5	0.23	55	6	340	20	<1	60	50	15
42	WR-4	17.0	18.5	508	5	<0.5	0.11	50	6	200	15	<1	55	20	9
43	WR-4	31.5	33.0	526	1	<0.5	0.12	55	5	330	20	<1	52	150	16
44	WR-4	41.5	43.0	602	3	<0.5	0.20	55	5	290	24	<1	59	230	10
45	WR-4	51.5	53.0	499	3	<0.5	0.29	55	8	220	32	<1	58	20	12
46	WR-4	66.5	68.0	563	1	<0.5	0.16	55	6	420	40	<1	50	240	11
47	WR-4	71.5	73.0	390	5	<0.5	0.27	45	5	390	36	<1	45	20	11
48	M-1	0.5	1.5	684	10	<0.5	0.19	40	6	410	30	<1	57	20	10
49	M-1	2.0	3.0	778	8	<0.5	0.20	40	5	380	30	<1	57	20	6
50	M-1	3.5	4.5	747	5	<0.5	0.21	40	5	230	23	<1	55	20	6
51	M-1	5.0	6.0	675	5	<0.5	0.25	40	6	300	28	<1	52	20	9
52	M-1	10.5	12.0	629	10	<0.5	0.21	35	8	270	35	<1	57	20	10
53	M-1	15.5	16.5	759	8	<0.5	0.27	40	5	340	42	<1	50	10	11
54	M-2	0	1.5	481	10	<0.5	0.18	40	6	440	27	<1	65	20	8
55	M-2	1.5	3.0	505	13	<0.5	0.27	40	5	560	29	1	143	60	9
56	M-2	3.0	4.5	735	14	<0.5	0.21	40	6	550	48	<1	80	140	7
57	M-2	4.5	6.0	696	10	<0.5	0.17	40	6	380	32	<1	72	130	7
58	M-2	11.5	13.0	605	10	<0.5	0.23	40	8	500	55	<1	67	70	7
59	M-2	16.5	18.0	421	8	<0.5	0.10	50	6	220	31	<1	88	10	3

Chemical Analyses of Overburden Intervals

Sample No.	Drill Hole No.	Interval, ft From	Interval, ft To	Water Soluble Magnesium ppm	Water Soluble Calcium ppm	Water Soluble Potassium ppm	Water Soluble Boron ppm	Water Soluble Sulfate ppm	DTPA Extractable Copper ppm	DTPA Extractable Manganese ppm	DTPA Extractable Iron ppm	DTPA Extractable Zinc ppm	Ammonium ppm	Nitrate ppm	Molybdenum Anion Exchangeable ppm	Gypsum MEQ/100 g	Lime lbs $CaCO_3$ per Acre
1	R-1	0	1.5	14	98	130	0.7	119	2.2	53.0	120	2.0	(1)	(1)	(1)	0	0
2	R-1	1.5	3.0	18	37	69	1.0	460	2.8	50.4	102	1.0	35	8.0	<0.01	0	0
3	R-1	3.0	4.5	90	59	75	1.0	1463	2.6	35.0	114	1.0	35	7.1	<0.01	0	0
4	R-1	4.5	6.0	567	915	58	0.9	6362	2.4	30.0	98	1.1	29	7.1	0.54	0	0
5	R-1	9.5	11.0	464	422	37	0.9	5078	2.3	15.0	102	0.7	32	3.5	0.80	0	0
6	R-1	14.5	16.0	45	79	14	0.7	613	2.4	21.6	88	1.4	29	5.8	<0.01	0	0
7	R-1	19.5	21.0	24	47	66	<0.5	107	2.6	36.4	70	0.8	26	7.5	<0.01	0	0
8	R-1	24.5	26.0	13	41	16	<0.5	171	2.7	19.6	86	2.0	13	0.4	<0.01	0	0
9	R-1	29.5	31.0	19	57	11	0.6	111	2.7	26.0	90	1.2	26	2.7	0.65	0	0
10	R-1	34.5	36.0	35	59	11	0.6	177	3.8	27.6	132	1.2	29	11.5	<0.01	0	0
11	R-1	39.5	41.0	21	43	13	<0.5	66	2.3	24.0	98	0.8	29	9.7	0.36	0	0
12	R-1	44.5	46.0	14	59	11	<0.5	101	2.6	27.6	136	1.3	32	8.0	0.39	0	0
13	R-1	49.5	51.0	22	46	12	<0.5	79	2.4	26.0	124	1.8	21	4.4	0.32	0	0
14	R-1	54.5	56.0	22	50	10	<0.5	86	2.6	19.6	100	1.2	13	6.2	0.31	0	0
15	R-1	59.5	61.0	29	54	16	0.6	102	3.3	24.8	150	1.2	13	(1)	0.27	0	0
16	R-1	64.5	66.0	23	51	13	<0.5	94	1.9	26.2	124	1.2	26	11.0	0.53	0	0
17	R-1	69.5	71.0	28	54	13	<0.5	106	3.0	13.6	126	1.2	29	10.6	0.31	0	0
18	WR-1	0	0.8	2	51	8	<0.5	36	0.5	29.6	112	1.0	13	3.5	<0.01	0	0
19	WR-1	3.0	3.5	1	11	3	0.6	27	0.3	23.2	114	0.8	13	20.6	0.09	1.5	0
20	WR-1	5.0	6.0	4	21	5	0.7	530	0.2	29.6	116	0.5	13	7.5	0.13	1.3	0
21	WR-1	9.0	9.3	4	27	10	0.7	75	0.6	59.6	198	1.4	26	(1)	0.09	0	0
22	R-2	0	1.5	13	78	4	0.7	30	0.8	42.4	38	0.3	13	15.0	0.13	0	0
23	R-2	1.5	3.0	13	27	4	0.7	37	1.1	38.0	68	0.6	13	7.5	0.06	0	0
24	R-2	3.0	4.3	21	17	5	1.1	442	1.5	37.2	90	0.9	26	6.2	0.31	0	0
25	WR-2	0	1.5	42	103	30	0.8	82	2.8	59.0	172	1.8	29	130.0	0.33	0	0
26	WR-2	1.5	3.0	33	63	17	0.9	111	1.8	43.0	120	1.1	13	21.5	0.36	0	0
27	WR-2	3.0	4.5	45	82	17	<0.5	207	2.7	52.0	156	1.4	13	14.5	0.52	0	0
28	WR-2	4.5	6.0	34	54	14	0.8	158	2.2	45.0	136	1.3	29	9.7	0.71	0	0
29	WR-2	16.0	17.5	48	52	19	<0.5	207	2.1	18.0	134	0.7	26	4.4	0.60	0	0
30	WR-2	31.0	32.5	25	36	35	<0.5	90	0.9	72.8	144	0.5	26	2.0	1.19	0	0
31	WR-2	41.0	42.5	28	35	12	0.8	122	0.7	102.4	180	0.6	29	7.2	0.12	0	0
32	WR-2	46.0	47.5	39	45	13	<0.5	165	7.2	35.0	158	1.4	29	11.0	0.30	0	0
33	WR-2	61.0	62.5	37	51	14	0.6	131	8.8	40.0	256	1.0	58	15.5	0.47	0	0
34	WR-3	0	1.5	7	87	15	0.6	22	5.0	52.0	94	0.6	26	17.2	0.07	0	0
35	WR-3	1.5	3.0	7	60	4	<0.5	21	0.4	29.0	88	0.5	13	6.6	0.13	0	0
36	WR-3	3.0	4.5	7	34	22	0.7	58	0.4	53.6	134	0.5	29	6.1	0.13	0	0
37	WR-3	4.5	6.0	18	43	14	<0.5	92	0.4	38.4	150	0.7	29	3.3	0.24	0	0
38	WR-3	10.5	10.9	1	17	7	<0.5	68	0.7	22.4	108	1.4	35	11.1	0.14	0	0
39	WR-4	0	1.5	39	66	20	1.1	186	5.6	112.0	252	1.5	32	11.1	0.86	0	0
40	WR-4	2.0	3.5	28	66	16	1.5	187	2.6	76.0	150	1.2	32	11.1	0.93	0	0
41	WR-4	6.0	7.5	57	30	47	1.8	200	1.3	30.0	58	0.7	29	4.4	0.93	0	0
42	WR-4	17.0	18.5	31	40	10	1.5	182	0.6	23.6	88	0.6	32	6.1	0.67	0	0
43	WR-4	31.5	33.0	28	39	10	0.7	164	3.5	27.6	114	0.8	32	15.5	0.55	0	0
44	WR-4	41.5	43.0	39	51	14	<0.5	167	3.3	42.0	168	1.2	35	5.0	0.19	0	0
45	WR-4	51.5	53.0	150	200	21	0.9	804	2.4	23.6	154	3.3	38	8.9	18.70	0	0
46	WR-4	66.5	68.0	60	73	24	0.9	261	6.9	16.0	146	1.1	35	6.6	0.38	0	0
47	WR-4	71.5	73.0	24	33	11	1.9	61	1.8	23.6	214	1.0	29	3.3	0.29	0	0
48	M-1	0.5	1.5	22	66	34	2.0	57	1.5	33.6	120	1.1	29	27.7	0.22	0	0
49	M-1	2.0	3.0	19	56	26	1.3	41	1.9	44.8	172	1.2	29	3.3	0.15	0	0
50	M-1	3.5	4.5	11	51	12	0.9	47	1.4	28.8	102	1.3	29	8.9	0.32	0	0
51	M-1	5.0	6.0	35	96	21	0.7	285	1.9	36.4	126	1.4	29	5.5	0.16	0	0
52	M-1	10.5	12.0	25	60	21	<0.5	142	2.0	42.4	164	1.5	29	12.2	0.24	0	0
53	M-1	15.5	16.5	25	47	18	1.4	75	2.8	38.0	176	1.2	29	17.2	0.14	0	0
54	M-2	0	1.5	21	84	13	1.5	33	2.5	64.0	118	1.1	29	21.0	0.21	0	0
55	M-2	1.5	3.0	124	110	20	2.0	1000	3.4	46.0	204	1.3	29	3.3	0.75	0	0
56	M-2	3.0	4.5	328	123	35	1.8	4753	3.1	24.4	160	1.2	29	7.8	0.79	0	0
57	M-2	4.5	6.0	256	100	27	1.6	4193	4.3	21.0	106	1.0	29	11.6	0.50	0	0
58	M-2	11.5	13.0	97	93	19	2.3	1463	4.7	22.4	156	1.5	29	24.4	0.21	0	0
59	M-2	16.5	18.0	27	26	17	1.0	275	1.4	53.6	190	1.3	29	2.2	0.28	0	0

1/ Insufficient sample for analysis.

Chemical Analyses of Overburden Intervals

Sample No.	Drill Hole No.	Interval, ft		NH4 Acetate Extractable			Background Radioactivity					Organic Matter %
		From	To	Potassium ppm	Nickel ppm	Lead ppm	Uranium ppm	Equivalent Uranium ppm	Equivalent Thorium ppm	Potassium Radioactivity %	Radium^{266} Picocuries per g	
1	R-1	0	1.5	790	1.0	0.6	5	(1)	(1)	(1)	(1)	5.31
2	R-1	1.5	3.0	930	0.7	0.6	3	4	7	3.0	1.5	2.84
3	R-1	3.0	4.5	510	1.0	0.6	3	4	11	2.4	1.0	2.95
4	R-1	4.5	6.0	290	1.2	0.6	2	4	10	2.3	1.0	2.19
5	R-1	9.5	11.0	170	1.0	0.6	3	3	10	2.1	1.0	1.74
6	R-1	14.5	16.0	160	0.7	0.6	3	4	10	2.5	1.5	1.87
7	R-1	19.5	21.0	130	0.8	0.6	3	2	11	2.7	0.5	1.23
8	R-1	24.5	26.0	150	1.2	0.6	3	4	13	2.3	1.5	2.29
9	R-1	29.5	31.0	80	0.6	0.1	3	3	10	2.2	1.0	1.40
10	R-1	34.5	36.0	190	0.9	0.4	4	4	8	2.5	1.0	2.08
11	R-1	39.5	41.0	130	0.8	0.4	3	3	11	2.5	1.0	2.16
12	R-1	44.5	46.0	160	0.7	0.6	4	3	8	2.7	1.0	2.25
13	R-1	49.5	51.0	140	1.2	0.4	5	4	6	2.5	1.5	2.91
14	R-1	54.5	56.0	150	1.2	0.6	4	3	8	2.8	1.0	2.25
15	R-1	59.5	61.0	210	1.0	0.4	3	5	9	2.4	1.5	2.05
16	R-1	64.5	66.0	120	0.9	0.4	4	3	8	2.6	1.0	2.47
17	R-1	69.5	71.0	200	0.7	0.4	3	3	10	2.7	1.0	1.76
18	WR-1	0	0.8	80	1.0	0.4	4	3	10	2.2	1.0	0.59
19	WR-1	3.0	3.5	50	0.8	0.1	3	2	8	2.6	0.5	0.23
20	WR-1	5.0	6.0	40	1.0	0.1	3	2	15	2.5	0.5	0.34
21	WR-1	9.0	9.3	90	1.2	0.3	6	4	14	2.7	1.5	0.36
22	R-2	0	1.5	160	1.2	0.5	2	3	14	2.1	1.0	2.57
23	R-2	1.5	3.0	140	1.0	0.5	3	3	9	2.2	1.0	1.61
24	R-2	3.0	4.3	160	1.2	0.4	3	3	10	2.2	1.0	2.10
25	WR-2	0	1.5	430	1.1	0.4	5	3	14	2.9	1.0	4.56
26	WR-2	1.5	3.0	280	0.7	0.5	3	3	11	3.0	1.0	3.14
27	WR-2	3.0	4.5	270	1.0	0.4	3	4	6	2.8	1.5	3.27
28	WR-2	4.5	6.0	170	0.7	0.3	3	3	11	2.8	1.0	2.99
29	WR-2	16.0	17.5	220	1.0	0.3	2	3	12	2.1	1.0	0.96
30	WR-2	31.0	32.5	120	1.1	1.2	3	3	11	2.8	1.0	0.30
31	WR-2	41.0	42.5	120	0.8	0.1	2	3	12	2.9	1.0	0.34
32	WR-2	46.0	47.5	210	1.0	0.4	2	3	12	2.7	1.0	1.02
33	WR-2	61.0	62.5	160	0.9	0.3	3	4	12	2.6	1.5	2.45
34	WR-3	0	1.5	160	1.2	0.5	4	3	9	2.7	1.0	2.29
35	WR-3	1.5	3.0	60	1.1	0.1	3	4	13	2.2	1.5	1.00
36	WR-3	3.0	4.5	40	1.0	0.4	4	2	11	2.3	1.0	0.59
37	WR-3	4.5	6.0	50	1.1	0.1	3	2	19	2.6	1.0	0.47
38	WR-3	10.5	10.9	80	1.1	0.2	3	3	11	2.8	1.0	0.15
39	WR-4	0	1.5	350	1.2	0.3	3	4	15	2.6	1.5	5.16
40	WR-4	2.0	3.5	270	1.0	0.3	4	2	13	2.8	0.5	2.74
41	WR-4	6.0	7.5	720	0.7	0.2	3	4	10	2.9	1.5	1.29
42	WR-4	17.0	18.5	140	0.5	0.2	2	3	10	2.3	1.0	0.32
43	WR-4	31.5	33.0	100	1.0	0.4	2	3	9	2.8	1.0	0.54
44	WR-4	41.5	43.0	190	1.0	0.4	4	2	11	2.6	1.0	0.64
45	WR-4	51.5	53.0	130	0.8	0.4	8	3	15	2.6	1.0	0.51
46	WR-4	66.5	68.0	200	1.0	0.4	8	4	17	2.6	1.0	1.82
47	WR-4	71.5	73.0	100	1.0	0.5	2	3	7	2.3	1.0	4.82
48	M-1	0.5	1.5	370	1.2	0.3	3	3	5	2.1	1.0	3.25
49	M-1	2.0	3.0	190	1.0	0.3	3	4	9	2.3	1.0	2.76
50	M-1	3.5	4.5	140	0.8	0.3	3	3	6	2.5	1.0	1.99
51	M-1	5.0	6.0	190	0.8	0.4	4	3	6	2.4	1.0	2.24
52	M-1	10.5	12.0	230	1.0	0.4	3	3	7	2.4	1.0	2.76
53	M-1	15.5	16.5	190	1.0	0.2	3	2	7	2.8	1.0	2.83
54	M-2	0	1.5	260	1.0	0.6	4	4	4	2.4	1.5	2.93
55	M-2	1.5	3.0	210	1.3	0.6	4	3	10	2.1	1.0	1.60
56	M-2	3.0	4.5	230	1.0	0.5	5	4	4	2.2	1.0	0.93
57	M-2	4.5	6.0	200	1.0	0.4	5	3	9	2.2	1.0	0.93
58	M-2	11.5	13.0	160	0.7	0.4	6	4	8	2.7	1.5	1.12
59	M-2	16.5	18.0	90	1.1	0.3	3	2	5	2.5	0.5	0.36

1/ Insufficient sample for analyses.

2.5.2 Archaeological Survey

The final report (Olson et al., 1976) on the historical and archaeological resources of Tract C-a and vicinity was released in May 1976. This report summarized all the findings derived from the survey and artifact collections since the initial field survey in the summer of 1975; presented a literature review of the cultural history of the area; and included descriptions and photos of artifacts recovered from the area, their significance to the cultural setting and the extent of concentrations (clusters) of artifacts and sites.

Final assessment of information available provides a reasonably complete picture of aboriginal utilization of the Basin. The data suggest that the area was not utilized during winter months, but that it was used extensively during the more favorable months of the year. Camp sites were apparently chosen because of proximity to water and food, seasonal variations in climate, or perhaps personal preference. Locations and concentrations of sites suggest multiple use of the area by both sexes, with males involved in hunting (deer and small game) and women in gathering and processing of plant foods (pinyon nuts, grass seeds, etc.).

Early cultures represented by artifacts recovered during the survey include Fremont (perhaps from 400 A.D. to 1,350 A.D.), and Ute (from ? to 1881).

Historic occupation of the area by Anglos pre-dates Ute disappearance and continues to the present. Historic Anglo utilization has centered around ranching, with extensive sheep and cattle grazing. Anglo influence is represented by horse traps, corrals and cabins throughout the area, some of which are still in use.

Extensive recent use of the area by deer hunters is evidenced by modern-day deer blinds, camp sites and refuse.

The Ryan Gulch School, several miles off tract has been designated a historic landmark by the Rio Blanco County Historical Society.

Other evidence of early Anglo occupation is found in the old 84 Ranch to the east of the tract. Unfortunately, it has been largely destroyed, and much of its historic significance has been lost.

The number of artifacts recovered from the area in combination with the pattern of artifact locations indicate that some of the sites might possibly contribute to knowledge of the pre-history of the region. Therefore, sites associated with important site clusters were recommended for nomination to the National Register of Historic Places. Four site clusters were identified. Three of these clusters were considered important and all primary and secondary sites within their boundaries were recommended for nomination.

Additionally, five primary sites outside the confines of a site cluster, but within the proposed development area, were recommended for mitigation, first by avoidance, if possible or by other measures if necessary. Seven secondary sites were recognized as potentially important and were recommended for limited testing prior to disturbance to determine ultimate importance of the site.

One historic site, a horse trap, was recommended for nomination to the Register.

Prior to the 1975 survey discussed herein, Dr. Calvin Jennings, Colorado State University, conducted an archaeological survey in the Piceance Basin. He reported four sites in the vicinity of Tract C-a to be of National Register significance. Subsequent to his early reports, one of the sites, 84 Ranch, has been largely destroyed. Therefore, Dr. Jennings no longer considers the 84 Ranch site important (Calvin Jennings, personal communication). He does, however, retain the belief that the other three sites originally considered of Register significance should be nominated to the National Register of Historic Places. Dr. Jennings is currently preparing a statement of importance on these three sites to be filed with proper state and federal agencies. Upon release of this statement, Dr. Jennings' recommendations will be considered for inclusion into the Tract C-a final archaeological report.

Currently, the final report on the RBOSP archaeological survey and assessment is being reviewed by the Bureau of Land Management (BLM), the Area Oil Shale Supervisor (AOSS) and the State Historic Preservation Office (SHPO). Pending their approval of the final report, measures will be taken to assure compliance with the National Historic Preservation Act of 1966 and Executive Order 11593. Sites considered eligible to the National Register will be identified, nominations will be initiated and mitigation measures appropriate to the proposed development (a 106/2(b) statement) filed by the BLM in cooperation with the AOSS and the SHPO. The 106/2(b) statement and comments made by the SHPO will then be forwarded to the Advisory Council on Historic Preservation for review and comment.

Suggested mitigation measures for historic sites will ultimately become a part of the "conditions of approval" for the DDP.

Literature Cited

Olson, A.P., T.G. Bridge, C. Craig, B. LaFree, and S. Steenrod. 1976. An archaeological survey assessment for Rio Blanco Oil Shale Project 1975. Univ. of Denver. 136p.

2.5.8 Paleontological Survey

Results of initial paleontological studies were reported in Progress Report 5-Summary. The following information updates that report with additional data compiled within this quarter.

2.5.8.1 Objective

The objective of this program is to estimate the potential for a significant paleontological discovery within or adjacent to Tract C-a during tract development. A significant discovery is here defined as one which is unique to the area or one in which an unusually large concentration of well-preserved fossils is located.

2.5.8.2 Methods

During the archaeological survey assessment performed for RBOSP on and in the vicinity of Tract C-a and 84 Mesa, field survey teams located a total of 196 archaeological sites and 1 historic site (Olson, et al. 1975, p. 14). At eight of these sites, shown on Figure 2.5.8-1, fragments of petrified wood and vertebrate remains were found. These were furnished to RBOSP for paleontological investigations.

The "paleo-finds" were forwarded to Dr. Paul O. McGrew, vertebrate paleontologist, University of Wyoming for identification and assessment of their paleontological significance. Emphasis was placed on determining if any of these fossils were paleontologically unique or rare as compared to fairly common or abundant fossils found throughout the Piceance Creek basin in particular and throughout the Tertiary basins of the tri-state area of NE Utah and SW Wyoming in general.

2.5.8.3 Results

Dr. McGrew's report[1] dated March 26, 1976 is summarized below:

Site No.	Identification
64	Fossil fragments of a uintathere vertebra, probably of the genus Eobasileus (Eocene, Uinta Formation).
157, 158, 196	Fossil fragments of turtle carapace or shell, genus not identifiable (probably Eocene, Uinta Formation).
123, 156	Fossil fragments of mammal bone, genus not identifiable (probably Eocene, Uinta Formation).

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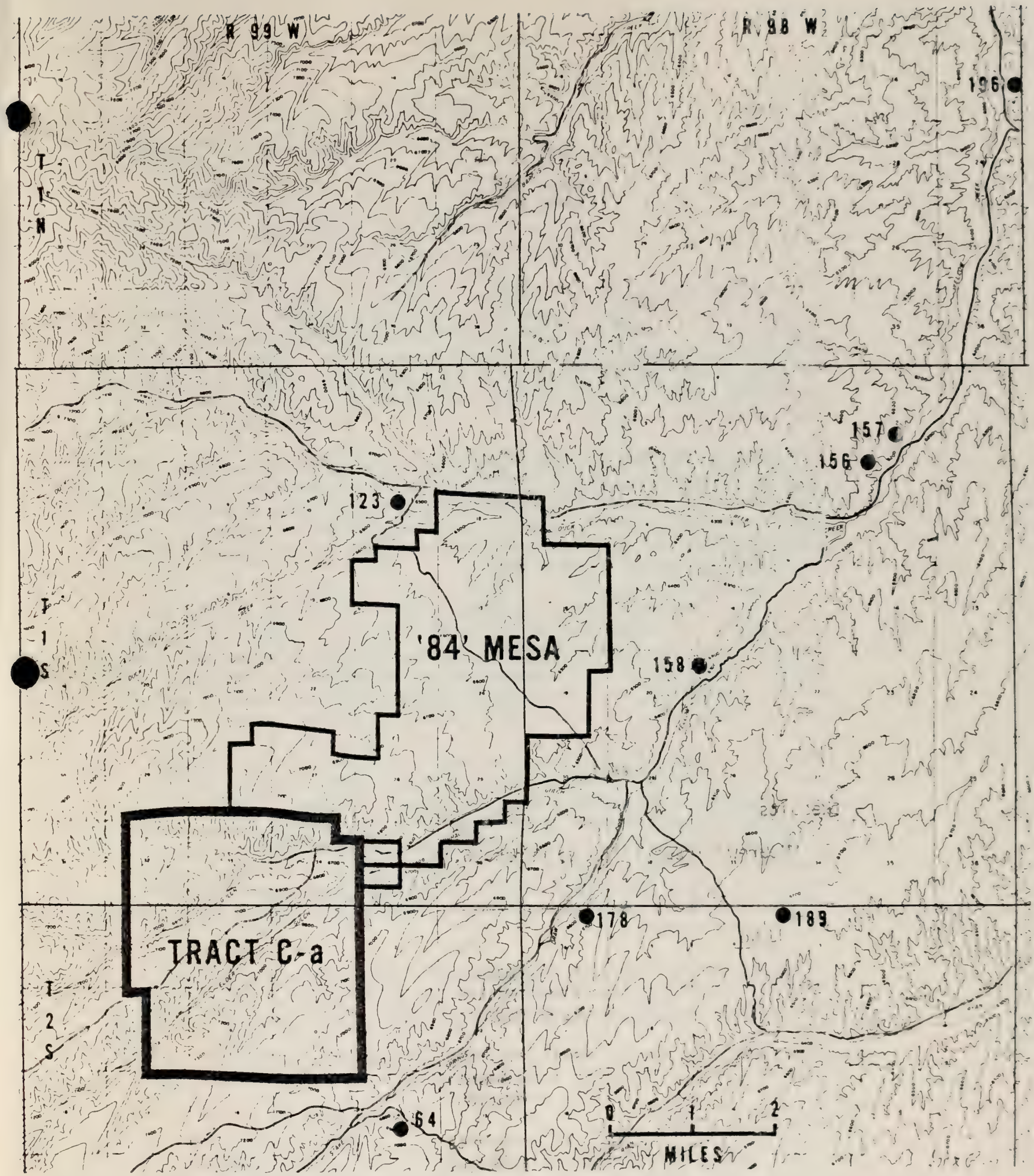
[1] See Appendix 2.5.8-1 for a copy of Dr. McGrew's report.



LEGEND

● Archaeological sites (8) at which 'Paleo-Finds' were located.

Figure 2.5.8-1 "Paleo-Finds" Map

Site No.	Identification
158	Fragments of petrified wood, not identifiable.
178, 189	Mammal bone scraps, not fossil, showing evidence of burning, probably by the archaeological sites' former inhabitants, identified as deer and bison bone.

Dr. McGrew concludes, "In themselves, none of these specimens is of paleontologic or stratigraphic significance. Turtle scraps are omnipresent in both near-shore and fluvial Eocene sediments of the entire Rocky Mountain area. Uintatheres are well known from the Bridger basin, the Washakie basin, the Sand Wash basin, etc. Scraps of fossil wood, too, occur throughout near-shore and fluvial Eocene sediments of the region".

"In summary, on the basis of this collection, I would consider the area of doubtful paleontologic significance. The Piceance Creek basin was probably not environmentally suited for an abundance of Eocene mammals. Certainly with the great amount of geologic work that has been done in the Piceance Creek basin, more evidence would have appeared by this time."

The Uinta Formation forms the bedrock at all eight archaeological sites where the fossils were located. All fossils were found lying loose on the rocky soil-covered ground with none attached to bedrock. However, they may have weathered out of bedrock at or near the sites. Therefore, no firm evidence exists that the fossils are or are not indigenous to the sites at which they were found.

There is a possibility that early man may have collected some of the fossils out of curiosity from various areas, brought them to the sites and subsequently discarded them. This possibility is supported to some degree by the fact that few fossils were found by the archaeological survey teams in a relatively large area. However, early man did make use of petrified wood. Olson, et al., (1975, p. 47) reports that petrified wood accounts for about 8% of the material from which tools were made by aboriginal inhabitants of the study area.

Although a significant paleontological discovery is always a possibility during any excavation on or adjacent to Tract C-a, that possibility is considered extremely remote based on the data compiled.

The "paleo-finds" are stored at RBOSP offices in Denver, for future reference and viewing by interested parties.

Literature Cited

Olson, A.P., T.G. Bridge, C. Craig, B. LaFree and S. Steenrod. 1976. An archaeological survey assessment for Rio Blanco Oil Shale Project 1975. Univ. of Denver. 136p.

Laramie, Wyoming
March 26, 1976

Mr. E. A. Ziemba
Rio Blanco Oil Shale Project
Dayton Commons
9725 East Hampden Ave.
Denver, Colorado 80231

Dear Mr. Ziemba:

I have examined the "fossil" material mailed to me on March 17. A couple of the specimens were real puzzlers hence the little job took longer than anticipated. I believe, however, that my conclusions are correct.

Identifications are as follows:

Loc. ~~57~~ 157 One scrap of the carapace of a fossil turtle. The genus and species are not identifiable. This specimen is obviously fossil and doubtless from the Uinta Formation.

Loc. 64 This was a tough one! After considerable study it was identified as a fragment of a posterior thoracic vertebra of a uintathere--probably of the genus Eobasileus. This form is well known in other basins. The specimen is almost certainly from the Uinta Formation. Associated with this are several scraps that may well be bits from the same vertebra.

(2)

Loc. 123 Two small scraps of mammal bone. Not identifiable but certainly fossil and probably from the Uinta Formation.

Loc. 156 An unidentifiable scrap of fossil bone. Probably mammalian.

Loc. 158 Three pieces of fossil wood, a small piece of weathered siliceous shale, and a fragment of fossil turtle shell.

Loc. 178 ~~159~~ A group of bone scraps that are not fossil. All have been burned (doubtless by indians). Most cannot be identified. Two epiphyses are certainly from the metapodial of a deer but are too corroded to distinguish between Odocoileus virginianus (white tail) and O. hemionus (mule deer). One fragment appears to be a small piece from a leg bone of Bison bison.

Loc. 189 One scrap of burned mammal bone. This specimen is not fossil and was probably burned by indians.

Loc. 196 Three fragments of fossil turtle shell. These almost certainly are from the Uinta Formation.

In themselves none of these specimens is of paleontologic or stratigraphic significance. Turtle scraps are omnipresent in both near shore and fluvial Eocene sediments of the entire Rocky Mountain area. Uintatheres are well known from the Bridger Basin, the Washakie Basin, the Sand Wash Basin, etc. Scraps of fossil wood, too, occur throughout near shore and fluvial Eocene sediments of the region.

In summary, on the basis of this collection I would consider the area of doubtful paleontologic significance. The Piceance Creek Basin was probably not enviornmentally suited for an abundance of Eocene mammals. Certainly with the great amount of geologic work that has been done in the Piceance Basin more evidence would have appeared by this time.

The collection is being returned under separate cover.

Sincerely,

Paul O. McGrew
Paul. O. McGrew